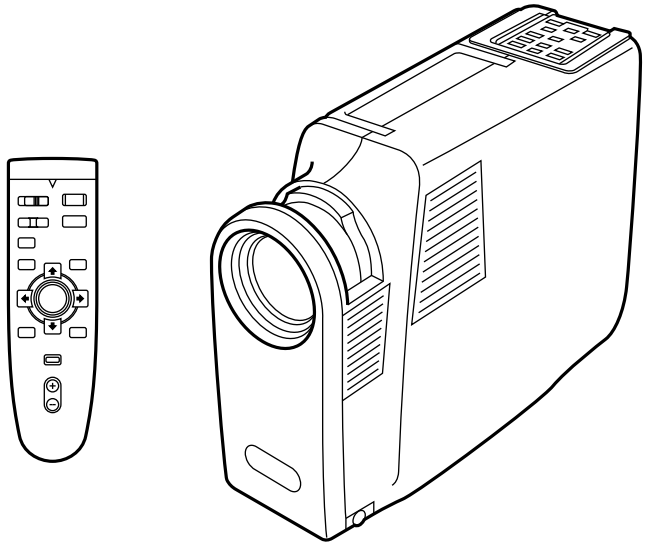
SERVICE MANUAL

MODEL	DEST.	CHASSIS NO.
VPL-SC50U	US/CND	
VPL-SC50E	AEP	
VPL-SC50M	AEP	



LCD DATA PROJECTOR

SONY

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS ÁLA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE ! SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

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http://getMANUAL.com

SONY

3-864-641-**11** (1)

LCD Data Projector

Operating Instructions EN

VPL-SC50U
VPL-SC50E
VPL-SC50M

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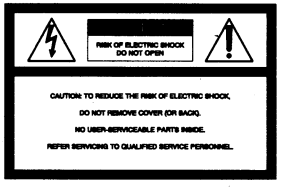
SECTION 1
OPERATING INSTRUCTIONS

This section is extracted from operation manual.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.


RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

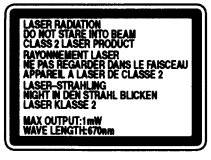
This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers of VPL-SC50E/SC50M



This label is located on the rear of the Remote Commander.

This label is located on the side of the Remote Commander.

For the customers of VPL-SC50U

This label is located on the rear of the Remote Commander.

This label is located on the rear of the Remote Commander.

Laser light shines out of this window.

Caution

use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes

- Do not aim the laser at people or not look into the laser transmitter.
- When the Remote Commander causes malfunction, consult with qualified Sony personnel. We change the Remote Commander as new one according to the guarantee.

For the customers in Canada

This Class A digital apparatus complies with Canadian ICES-003.

For the customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

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Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected to the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not aim the laser at people or not look into the laser transmitter.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.
- Be careful not to catch your fingers by the adjuster when you lift up the projector. Do not push hard on the top of the projector with the adjuster out.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

After you turn off the power with the I / ⏻ key on the Remote Commander or on the control panel, do not disconnect the unit from the wall outlet while the cooling fan is still running.

Caution
The projector is equipped with ventilation holes (intake) on the right side and ventilation holes (exhaust) on both sides and rear. Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals.

On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Features

High portability

- **Light weight/small size**
  This projector has come to miniaturized to 3.7 kg (8 lb 3 oz) of mass by adopting magnesium die-casting body. And a carrying handle is epuipped with the projector. You can easily carry it with your computer.

High brightness, high picture quality

- **High brightness**
  Adopting the new developed optical system and the 120 W UHP lamp allow high brightness (light output 500 ANSI lumen) and excellent uniformity on the picture.
- **High resolution**
  By adopting three 0.9-inch, 480,000-pixel SVGA panels, this projector offers resolution of 800 × 600 dots for RGB input and 600 horizontal TV lines for video input.

Simple setup, easy presentation

- **Simple setup with external equipment**
  This projector has 22 kinds of preset data for input signals. You can get a suitable picture by connecting an equipment with supplied cable.
- **Remote Commander with mouse control and laser pointer functions**
  You can operate a computer with the Remote Commander since the unit has a build-in mouse receiver. For your presentation, you can use the laser pointer built in the Remote Commander as well.

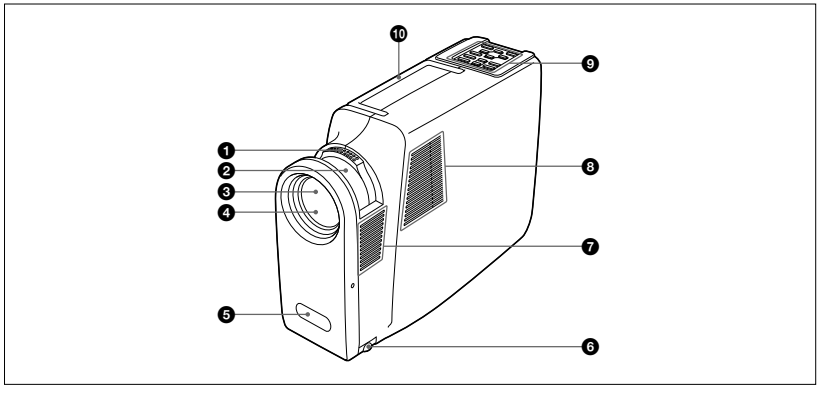
Accepts various input signals

- **Compatible input signals**
  This projector accepts video signals of the composite, S video, and component as well as the VGA[1)], SVGA[1)] and XGA[1) 2)] signals, which all can be displayed.
- **Compatible with five color systems**
  NTSC, PAL, SECAM, NTSC 4.43[3)], or PAL-M color system can be selected automatically or manually.

1) VGA, SVGA and XGA are registered trademarks of the International Business Machines Corporation, U.S.A.
2) Compressed XGA signal is reprodued.
3) NTSC4.43 is the color system used when playing back a video recorded on NTSC on a NTSC4.43 system VCR.

Location and Function of Controls

Front/Left Side



❶ Zoom ring
Adjusts the size of the picture.

❷ Focus ring
Adjusts the picture focus.

❸ Lens
Open the lens shutter before projection.

❹ Lens shutter

❺ Front remote control detector

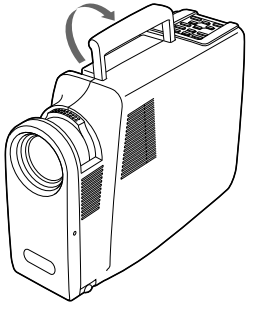
❻ Adjuster
Used to keep the projector level if it is installed on an uneven surface.
For details on how to use the adjusters, see "How to use the adjuster" on page 13 (EN).

❼ Ventilation holes (exhaust)

❽ Left speaker

❾ Control panel
For details, see "Control panel" on page 10 (EN).

❿ Carrying handle
Pull up the handle from the projector for carrying.

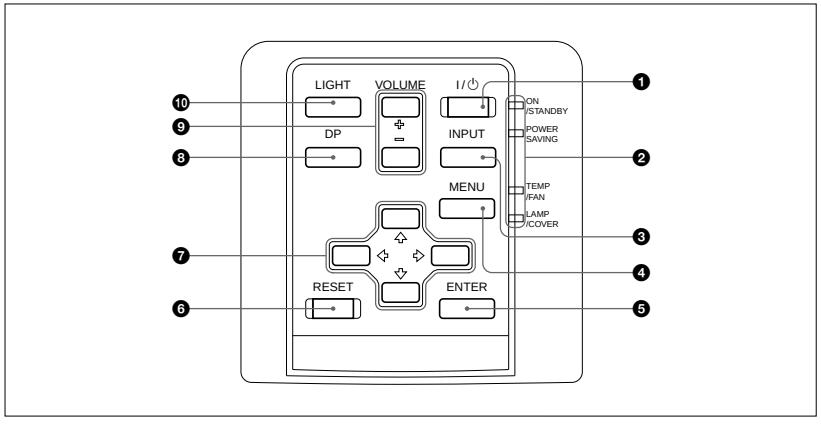


Notes

- Do not place anything near the ventilation holes as it may cause internal heat build-up.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.

Location and Function of Controls

Control panel



❶ I / ⏻ (on / standby) key
Turns on and off the projector when the projector is in the standby mode. The ON/STANDBY indicator lights in green when the power is turned on.
When turning off the power, press the I / ⏻ key twice following the message on the screen, or press and hold the key for about one second.
For details on steps for turning off the power, see "To turn off the power" on page 23 (EN).

❷ Indicators
ON/STANDBY: Lights up or flashes under the following conditions:
- Lights in red when the AC power cord is plugged into the wall outlet. Once in the standby mode, you can turn on the projector with the I / ⏻ key on the Remote Commander or on the control panel.
- Lights in green when the power is turned on.
- Flashes in green while the cooling fan runs after turning off the power with the I / ⏻ key. The fan runs for about 90 seconds after turning off the power.
  The ON/STANDBY indicator flashes quickly for the first 30 seconds.
  During this time, you cannot turn the power back on with the I / ⏻ key.

POWER SAVING: Lights up when the projector is in the power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In the power saving mode, any key does not function for the first 30 seconds. The power saving mode is canceled when a signal is input or any key is pressed.

TEMP (Temperature)/FAN: Lights up or flashes under the following conditions:
- Lights up when temperature inside the projector becomes unusually high.
- Flashes when the fan is broken.

LAMP/COVER: Lights up or flashes under the following conditions:
- Lights up when the lamp has reached the end of its life or becomes a high temperature.
- Flashes when the lamp cover or air filter cover is not secured firmly.

For details on the LAMP/COVER and the TEMP/FAN indicators, see page 36 (EN).

❸ INPUT key
Selects the input signal. Each time you press the key, the input signal switches between video/audio input and INPUT-A connector.

❹ MENU key
Displays the on-screen menu. Press again to clear the menu.

❺ ENTER key
Enters the settings of items in the menu system.

❻ RESET key
Resets the value of an item back to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

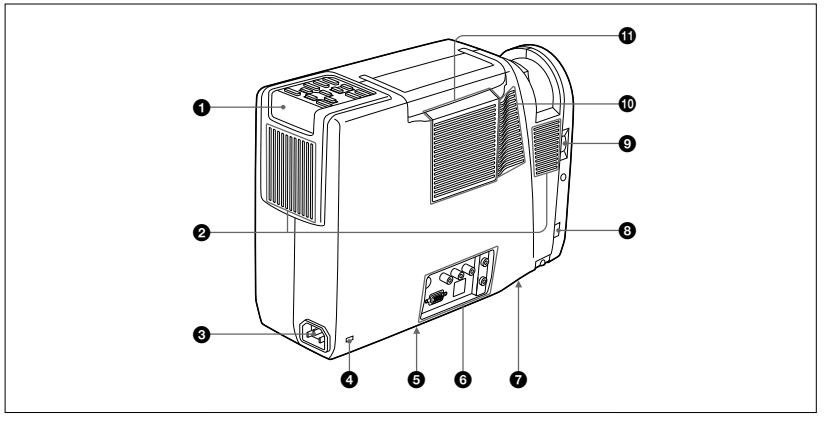
❼ Arrow keys (↑/↓/←/→)
Used to select the menu or to make various adjustments.

❽ DP (Dot Phase) key
Adjusts the dot phase when a signal from the computer is input.

❾ VOLUME +/– keys
Adjust the volume of the built-in speakers and output level of the AUDIO OUT jack.
+ : Increases the volume.
– : Decreases the volume.

❿ LIGHT key
Lights the back lighting (orange) for the keys on the control panel when the power is turned on. Press again to turn off the back lighting.

Rear/Right Side/Bottom



1 Rear remote control detector

2 Ventilation holes (exhaust)

3 AC IN socket
Connects the supplied AC power cord.

4 Security lock
Connects to an optional security cable (Kensington's).

The security lock corresponds to Kensington's MicroSaver Security System.
If you have any comment, contact
Kensington
2853 Campus Drive, San Mates, CA 94403
U.S.A.
Tel: 800-535-4242: extension 3348
Home page address: http://www.kensington.com/

5 75Ω termination switch (bottom)
Normally set to ON. Set it to OFF when the projector is connected to a computer or a monitor.

6 Connector panel
For details, see page 14 (EN).

7 Lamp cover (bottom)

8 Adjuster button

9 Lens shutter dial
Turn the dial upward to open the lens shutter.

10 Right speaker

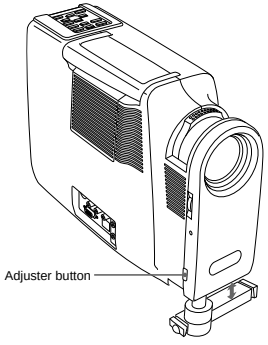
11 Ventilation holes (intake)/air filter cover

Notes
- Do not place anything near the ventilation holes as it may cause internal heat build-up.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.

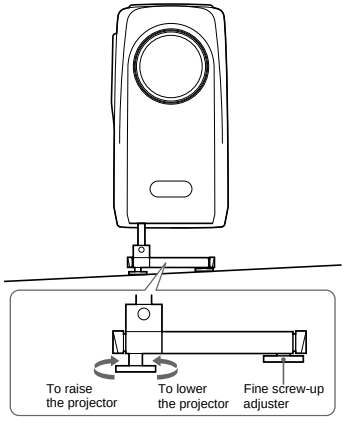
How to use the adjuster

To adjust height
While lifting the projector, adjust the height so that the projector becomes level.

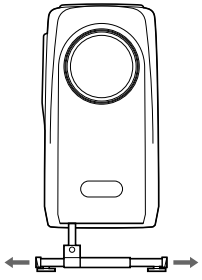
Press the adjuster button while lifting the projector to adjust the height.



The two fine screw-up adjusters are equipped with the projector.
As for the fine screw-up adjusters, turn them for fine adjustment.

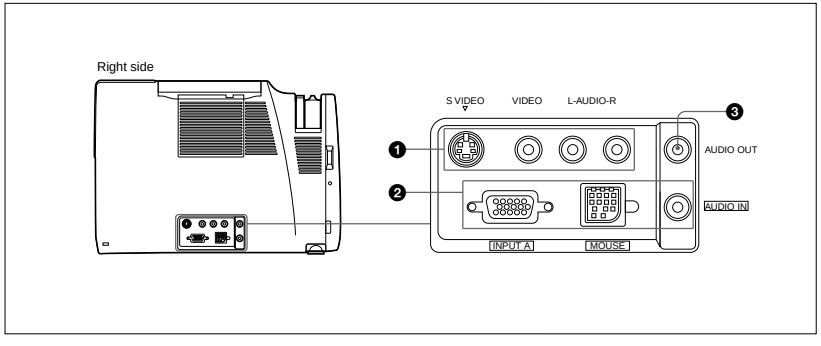


To stand the projector firmly
The adjuster can be stretched outwards to stand the projector firmly.



Notes
- Be careful not to let the projector down on your fingers.
- Do not push hard on the top of the projector with the adjusters out.

Connector panel



❶ Video/audio input connector
Connect to external video equipment such as a VCR.

S VIDEO (mini DIN 4-pin): Connects to the S video output (Y/C video output) of a video equipment.

VIDEO (phono type): Connects to the composite video output of video equipment.

Note

If you connect video equipment to both the S VIDEO and VIDEO jacks, the signal from the S VIDEO jack is selected. When projecting the picture via the VIDEO jack, be sure not to connect a cable to the S VIDEO jack.

AUDIO input L (MONO)/R jacks (phono type): Connect to the audio output of equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

❷ INPUT-A connector
Connect to external equipment such as a computer. You can control the mouse signal with the Remote Commander.

INPUT A (HD D-sub 15-pin, female): Connects to the monitor output on a computer using the supplied cable. When inputting a component signal, use the optional cable.

MOUSE (13-pin): Connects to the mouse port on a computer to control the mouse function using the supplied mouse cable.

AUDIO IN (stereo minijack): Connects to the audio output on a computer to input the audio signal.

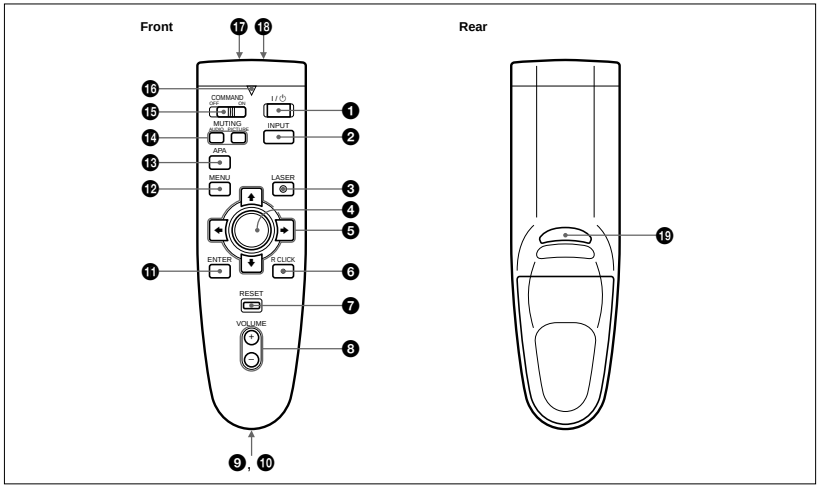
❸ AUDIO OUT jack (stereo minijack)
Connects to external active speakers.
The volume of the speakers can be controlled by the VOLUME keys on the Remote Commander or the control panel.

Remote Commander

The keys which have the same names as on the control panel function identically.
You can control a connected computer using the Remote Commander.
For details, see "Connecting with a Computer" on page 18 (EN).

Notes on laser beam

- **Do not look into the laser transmitter.**
- **Do not aim the laser at people.**



❶ I / ⏻ key

❷ INPUT key

❸ LASER key
Emits laser beam from the laser transmitter when you press this key.

❹ Joy stick
Functions as a mouse of a computer connected to the unit.

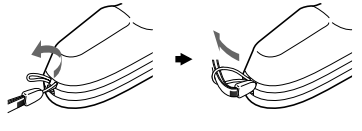
❺ Arrow keys (↑/↓/←/→)

❻ R CLICK key
Functions as a right button on a mouse. When connected to a Macintosh[1)] computer, the R CLICK key functions as a mouse button.

❼ RESET key

❽ VOLUME +/– keys

❾ Strap holder
Attaches the supplied strap.



(Continued)

1) Macintosh is a registered trademark of Apple Computer, Inc.

⑩ CONTROL S OUT jack (stereo minijack)
This jack does not operated with this unit.

Note

The Remote Commander does not function if the cable is connected to this jack.

⑪ ENTER key

⑫ MENU key

⑬ APA (Auto Pixel Alignment) key
This key does not operated with this unit.

⑭ MUTING keys
Cut off the picture and sound.
PICTURE: Cuts off the picture. Press again to restore the picture.
AUDIO: Cuts off the sound from speakers and AUDIO OUT jack. Press again or press the VOLUME + key to restore the sound.

⑮ COMMAND ON/OFF switch
When this switch is set to OFF, no key on the Remote Commander function. This saves the battery power.

⑯ Transmission indicator
Lights up when you press a key on the Remote Commander.
This indicator does not light up when you use the laser pointer.

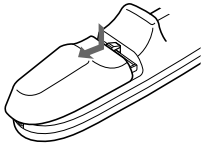
⑰ Infrared transmitter

⑱ Laser transmitter

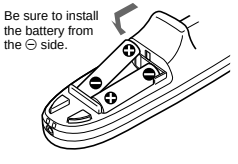
⑲ L CLICK key
Functions as a left button on a mouse. When connected to a Macintosh computer, the L CLICK key functions as a mouse button.

Battery installation

1 Push and slide to open the lid.



2 Install the two size AA (R6) batteries (supplied) with the correct polarity.



3 Replace the lid.

Notes on batteries

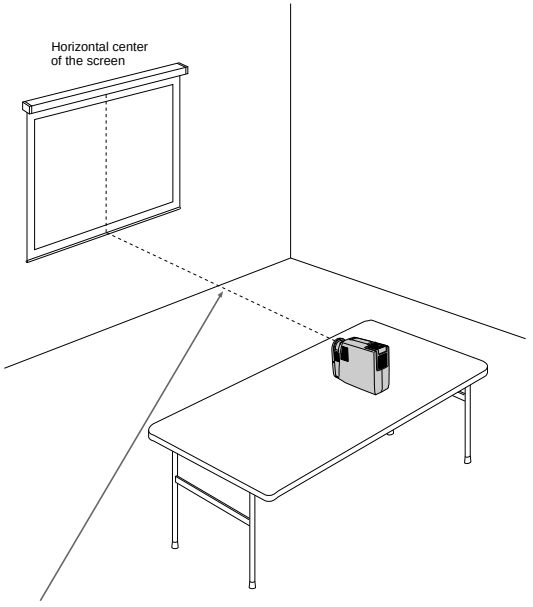
- Make sure that the battery orientation is correct when inserting batteries.
- Do not mix an old battery with a new one, or different types of batteries.
- If you will not use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If batteries have leaked, remove them, wipe the battery compartment dry and replace the batteries with new ones.

Notes on Remote Commander operation

- Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remote control detector on the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector is, the wider the angle within which the commander can control the projector.

Installing the Projector

This section describes the installation arrangements for installing the projector.



The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide.

Unit: m (feet)

Screen size (inches)		40	60	80	100	120	150
Distance	Minimum	1.4 (4.6)	2.2 (7.1)	2.9 (9.5)	3.6 (11.9)	4.4 (14.4)	5.5 (18.1)
	Maximum	1.6 (5.4)	2.5 (8.1)	3.3 (10.9)	4.2 (13.7)	5.0 (16.5)	6.3 (20.6)

For detailed information on installation measurements, see page 30 (EN).

- When the VGA signal is input, the picture size becomes smaller by 20%.
- When the Macintosh 16-inch mode (832 × 624) signal is input, the outer image (32 dots (horizontal) /24 lines (vertical)) is not displayed.
- When the XGA signal is input, the resolution is compressed to the 797 × 598 format.

Connecting

Connecting with a Computer

This section describes how to connect the projector with a computer.
For details on how to connect a VCR or component equipment, see page 20 (EN).

When the projector is connected to a computer, you can control the mouse of a computer by the Remote Commander.
The R/L CLICK keys and joy stick function as follows.

Note

Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remoter control detector on the projector.

Key and joy stick	Function	
	IBM PC/AT[a] compatible, Serial	Macintosh
R CLICK (front)	Right button	Mouse button
L CLICK (rear)	Left button	Mouse button
Joy stick	Corresponds with the movements of the mouse	

a) IBM PC/AT is a registered trademark of International Business Machines Corporation, U.S.A.

Also refer to the instruction manual of equipment to be connected.

Notes

- This unit accepts the VGA, SVGA and XGA signals. However, we recommend you to set the output mode of your computer to the SVGA mode for the external monitor.
- If you set your computer, such as a notebook type IBM PC/AT compatible, to output the signal to both the display of your computer and the external monitor, the picture of the external monitor may not appear properly. In such cases, set the output mode of your computer to output the signal to only the external monitor.
  For details, refer to the operating instructions supplied with your computer.

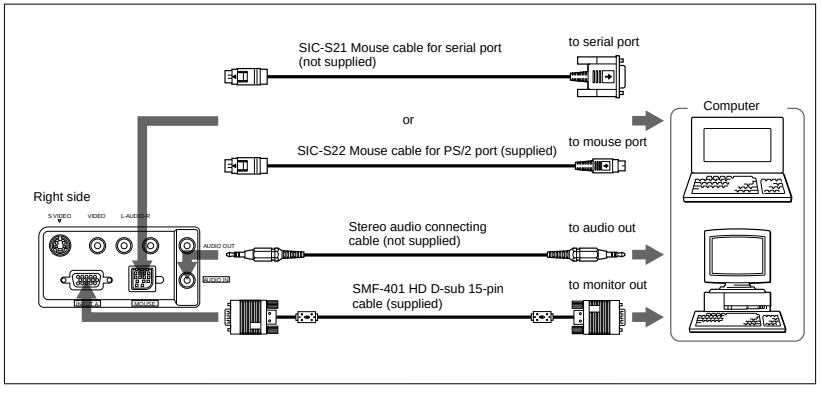
When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

Note

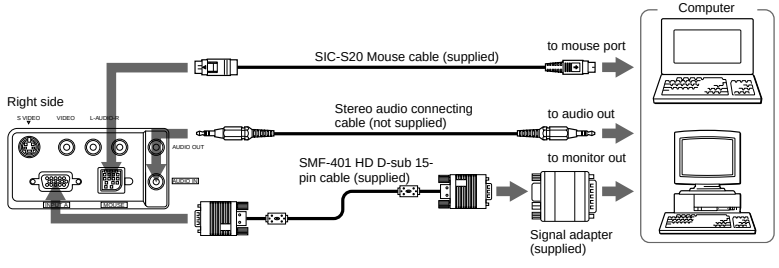
Supplied mouse cables may not work properly according to your computer.

When connecting with an IBM PC/AT compatible computer



When connecting with a Macintosh computer

For details on the DIP switch setting of the adapter, see page 39 (EN).



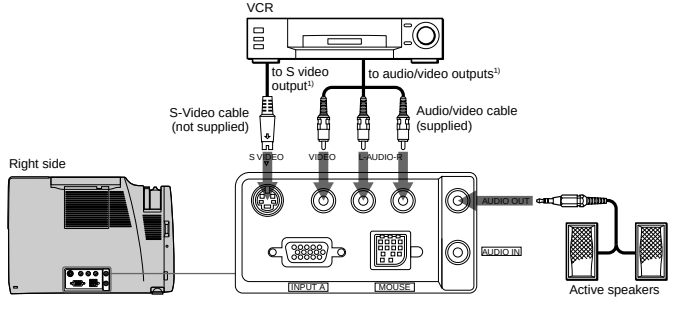
http://getMANUAL.com

Connecting with a VCR/Component Equipment

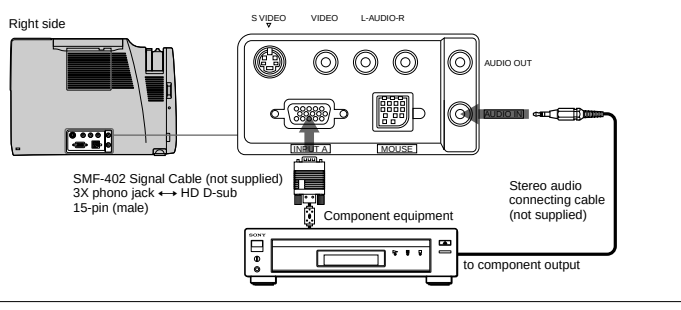
This section describes how to connect the projector with a VCR, external active speakers, and component equipment.
For details on how to connect a computer, see page 18 (EN).
Also refer to the instruction manuals of equipment to be connected.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.



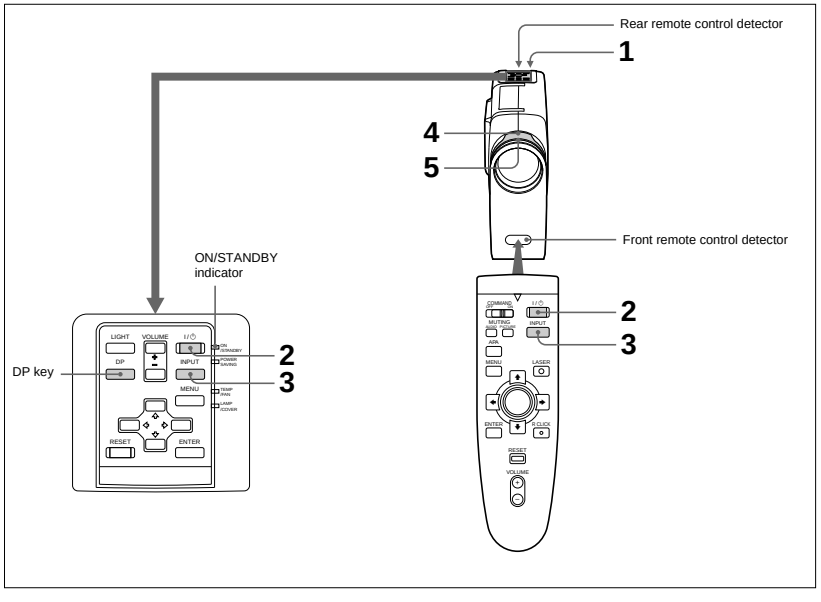
1) When both the S VIDEO and VIDEO jacks are connected to the external equipment, the input signal from the S VIDEO jack is selected.



Note

Set the aspect ratio using ASPECT in the INPUT SETTING menu according to the input signal.

Projecting



1 After all equipment is connected completely, plug the AC power cord into the wall outlet.

The ON/STANDBY indicator lights in red and the projector goes into the standby mode.

2 Press the I / ⏻ key on the Remote Commander or on the control panel.

The ON/STANDBY indicator lights in green.

3 Turn on equipment connected to the projector. Press the INPUT key on the Remote Commander or on the control panel to select the input source.

INPUT-A: Selects audio and video signals input from the INPUT-A connector.

VIDEO: Selects audio and video signals input from the video/audio input connector.
(If you connect to both the S VIDEO and VIDEO jacks, the signal from the S VIDEO jack is selected.)

(Continued)

Projecting

4 Turn the zoom ring to adjust the size of the picture.

5 Turn the focus ring to adjust the focus.

Note

Do not look into the lens when the projector lamp is on.

To	Press
Adjust the volume	the VOLUME +/– keys on the control panel or on the Remoter Commander.
Cut off the sound	the AUDIO MUTING key on the Remote Commander. To restore the sound, press the AUDIO MUTING key again or press the VOLUME + key.
Cut off the picture	the PICTURE MUTING key on the Remote Commander. To restore the picture, press the PICTURE MUTING key again.

To get the clearest picture

You can adjust the dot phase when a signal from the computer is input.
For details on DOT PHASE, see page 27 (EN).

1 Press the DP key on the control panel.

2 Press the ←/→ key on the Remote Commander or on the control panel to adjust the dot phase.

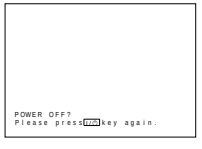
Adjust the picture to where it looks clearest.

You can also adjust the dot phase through the menu.
For details, see "The INPUT SETTING menu" on page 27 (EN).

To turn off the power

1 Press the I / ⏻ key on the Remote Commander or on the control panel.

The following message appears to confirm if you want to turn off the power.



Note

The message will disappear if you press any key except the I / ⏻ key, or if you do not press any key for five seconds.

2 Press the I / ⏻ key on the Remote Commander or on the control panel again.

The ON/STANDBY indicator flashes in green and the fan continues to run for about 90 seconds to reduce the internal heat. Also, the ON/STANDBY indicator flashes quickly for the first 30 seconds. During this time, you will not be able to turn the power back on with the I / ⏻ key.

3 Unplug the AC power cord from the wall outlet after the fan stops running and the ON/STANDBY indicator lights in red.

When you cannot confirm the on-screen message

When you cannot confirm the on-screen message in a certain condition, you can turn off the power by holding the I / ⏻ key on the Remote Commander or on the control panel for about one second.

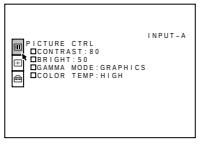
Note

Do not unplug the AC power cord while the fan is still running; otherwise, the fan will stop although the internal heat is still high, leading to breakdown of the projector.

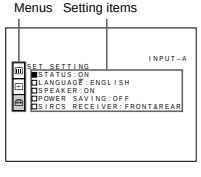
Using the MENU

The projector is equipped with an on-screen menu for making various adjustments and settings.
To select the language used in the menu, see page 29 (EN).

1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in blue.



2 Use the ↑ or ↓ key to select a menu, then press the → or ENTER key.
The selected menu appears.



3 Make setting or adjustment on an item.
For details on setting individual items, see the relevant menu pages.

To clear the menu display

Press the MENU key.
The menu display disappears automatically if no key is pressed for one minute.

To reset items that have been adjusted

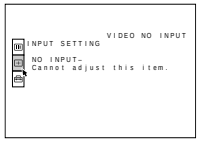
Press the RESET key.
"Complete!" appears on the screen and the settings appearing on the screen will be reset to their factory preset values.
Items which can be reset are:
- "CONTRAST", "BRIGHT", "COLOR", "HUE", and "SHARP" in the PICTURE CTRL menu
- "DOT PHASE", "SIZE", and "SHIFT" in the INPUT SETTING menu.

About the memory of the settings

The settings are automatically stored in the projector memory.

When no signal is input

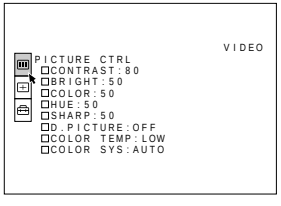
When there is no input signal, the screen turns blue and "NO INPUT–Cannot adjust this item." appears on the screen, and each item cannot be adjusted.



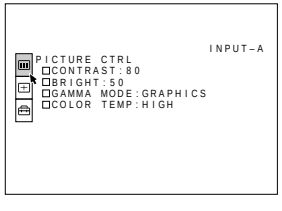
The PICTURE CTRL Menu

The PICTURE CTRL (control) menu is used for adjusting the picture.
Unadjustable items depending on the input signal are not displayed in the menu.

When the video signal is input



When the RGB signal is input



Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Adjust an item
- When changing the adjustment level:
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- When changing the setting:
  Press the ↑ or ↓ key to change the setting.
  Press the ENTER or ← key to restore the original screen.

CONTRAST

Adjusts the picture contrast.

The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

BRIGHT

Adjusts the picture brightness.

The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

Adjusts color intensity.

The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

Adjusts skin tones.

A higher the setting, the picture becomes greenish.
A lower the setting, the picture becomes purplish.

(Continued)

The PICTURE CTRL Menu

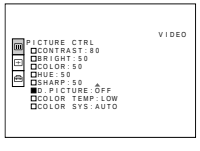
SHARP

Adjusts the picture sharpness.

The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

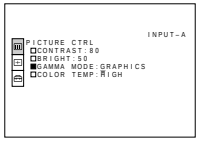
Emphasizes the black color.



ON: Emphasizes the black color to produce a bolder "dynamic" picture.
OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

GAMMA MODE

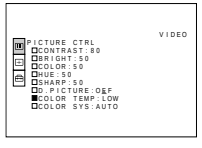
Selects a gamma correction curve.



GRAPHICS: Improves the reproduction of half tones. Photos can be reproduced in natural tones.
TEXT: Contrasts black and white. Suitable for images that contains lots of text.

COLOR TEMP

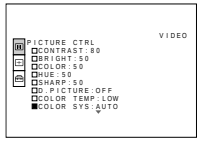
Adjusts the color temperature.



HIGH: Makes the white color bluish.
LOW: Makes the white color reddish.

COLOR SYS (System)

Selects the color system of the input signal.



Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

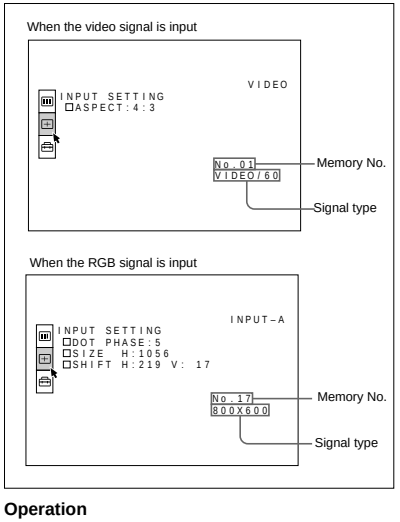
Input signals and adjustable/setting items

Item	Input signal			
	Video or S video (Y/C)	Component	RGB	B&W
CONTRAST	●	●	●	●
BRIGHT	●	●	●	●
COLOR	●	●	–	–
HUE	● (NTSC3.58/ 4.43 only)	–	–	–
SHARP	●	●	–	●
D. PICTURE	●	●	–	●
GAMMA MODE	–	–	●	–
COLOR TEMP	●	●	●	●
COLOR SYS	●	–	–	●

● : Adjustable/can be set
– : Not adjustable/can not be set

The INPUT SETTING Menu

The INPUT SETTING menu is used to adjust the input signal.
Unadjustable items depending on the input signal are not displayed in the menu.



Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Adjust an item
- When changing the adjustment level:
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- When changing the setting:
  Press the ↑ or ↓ key to change the setting.
  Press the ENTER or ← key to restore the original screen.

DOT PHASE

Adjusts the dot phase of the LCD panel and the signal input from the INPUT A connector.
Adjust the picture to where it looks clearest.

You can directly display the menu above with the DP key on the control panel.

SIZE

Adjusts the horizontal size of picture input from the INPUT A connector.

The higher the setting, the larger the horizontal size of the picture.
The lower the setting, the smaller the horizontal size of the picture. Adjust the setting according to the dots of the input signal. For details on the suitable value for the preset signals, see page 28 (EN).

SHIFT

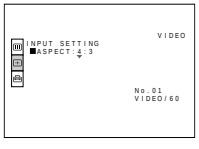
Adjusts the position of the picture input from the INPUT A connector.

H adjusts the horizontal position of the picture.
V adjusts the vertical position of the picture.
As the setting for H increases, the picture moves to the right, and as the setting decreases, the picture moves to the left.
As the setting for V increases, the picture moves up, and as the setting decreases, the picture moves down.
Use the ← or the → key to adjust the horizontal position and the ↑ and ↓ key for the vertical position.

(Continued)

ASPECT

Sets the aspect ratio of the picture.
When inputting 16:9 (squeezed) signal from equipment such as a DVD player, set to 16:9.



4:3: When the picture with ratio 4:3 is input.
16:9: When the picture with ratio 16:9 (squeezed) is input.

Input signals and adjustable/setting items

Item	Input signal			
	Video or S video (Y/C)	Component	RGB	B&W
DOT PHASE	–	–	●	–
SIZE	–	–	●	–
SHIFT	–	–	●	–
ASPECT	●	●	–	●

● : Adjustable/can be set
– : Not adjustable/can not be set

About the preset memory No.

This projector has 22 kinds of preset data for input signals for INPUT A (the preset memory). The memory number of the current input signal and the signal type are displayed when the preset signal is input. This projector automatically detects the signal type. When the signal is registered to the preset memory, a suitable picture is displayed on the screen according to the signal type. You can adjust the picture through the INPUT SETTING menu.
This projector also has 20 kinds of user memories for INPUT A. When an unpreset signal is input for the first time, memory number is displayed as 00. If the input signal is adjusted in the INPUT SETTING menu, the setting via INPUT A is stored under the memory number 51 to 70. When more than 20 user memories are registered for INPUT A, the newest memory is automatically stored over the oldest one.

Preset signals

Memory No.	Preset signal		fH (kHz)	fV (Hz)	Sync	SIZE
1	Video 60 Hz		15.734	59.940	H-neg V-neg	
2	Video 50 Hz		15.625	50.000	H-neg V-neg	
3	Component 60 Hz		15.734	59.940	H-neg V-neg	
4	Component 50 Hz		15.625	50.000	H-neg V-neg	
6	640 × 350	VGA mode 1	31.469	70.086	H-pos V-neg	800
7		VGA VESA[a] 85 Hz	37.861	85.080	H-pos V-neg	832
8	640 × 400	PC-9801[b] Normal	24.823	56.416	H-neg V-neg	848
9		VGA mode 2	31.469	70.086	H-neg V-pos	800
10		VGA VESA 85 Hz	37.861	85.080	H-neg V-pos	832
11	640 × 480	VGA mode 3	31.469	59.940	H-neg V-neg	800
12		Macintosh 13"	35.000	66.667	H-neg V-neg	864
13		VGA VESA 72 Hz	37.861	72.809	H-neg V-neg	832
14		VGA VESA 75 Hz	37.500	75.000	H-neg V-neg	840
15		VGA VESA 85 Hz	43.269	85.008	H-neg V-neg	832
16	800 × 600	SVGA VESA 56 Hz	35.156	56.250	H-pos V-pos	1024
17		SVGA VESA 60 Hz	37.879	60.317	H-pos V-pos	1056
18		SVGA VESA 72 Hz	48.077	72.188	H-pos V-pos	1040
19		SVGA VESA 75 Hz	46.875	75.000	H-pos V-pos	1056
20		SVGA VESA 85 Hz	53.674	85.061	H-pos V-pos	1048
21	832 × 624	Macintosh 16"	49.724	74.550	H-neg V-neg	1152
23	1024 × 768	XGA VESA 60 Hz	48.363	60.004	H-neg V-neg	1061
24		XGA VESA 70 Hz	56.476	70.069	H-neg V-neg	1048

a) VESA is a registered trademark of Video Electronics Standard Association.
b) PC-98 is a registered trademark of NEC Corporation.

Since the data is recalled from the preset memory about the following signals, you can use these preset data by adjusting SIZE. Make fine adjustment by adjusting SHIFT.

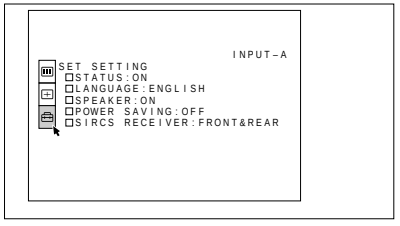
Signal	Memory No.	SIZE
Super Mac-2	23	1029
SGI-1	23	1035

Notes

- When the aspect ratio of input signal is other than 4:3, a part of the screen is displayed in black.
- When the VGA signal is input, the picture size becomes smaller by 20%.
- When the Macintosh 16-inch mode (832 × 624) signal is input, the outer image (32 dots (horizontal)/ 24 lines (vertical)) is not displayed.
- When the XGA signal is input, the resolution is compressed to the 797 × 598 format.

The SET SETTING Menu

The SET SETTING menu is used for changing the settings of the projector.



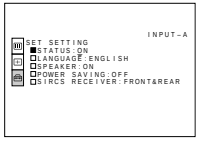
Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Change the setting
Press the ↑ or ↓ key to change the setting.
To restore the original screen, press the ENTER or ← key.

STATUS (on-screen display)

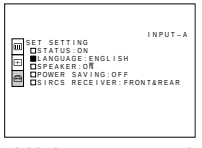
Sets up the on-screen display.



ON: Shows all of the on-screen displays.
OFF: Turns off the on-screen displays except for the menus, a message when turning off the power, and warning messages.
For details on the warning messages, see page 36 (EN).

LANGUAGE

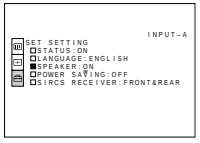
Selects the language used in the menu and on-screen displays.



Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

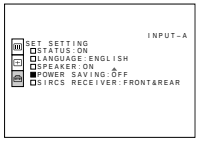
SPEAKER

Set to OFF to cut off the sound of the internal speakers. When set to OFF, “SPEAKER OFF” appears on the screen when you turn on the power.



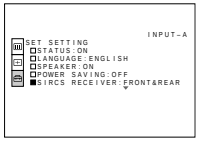
POWER SAVING

When set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes.



SIRCS RECEIVER

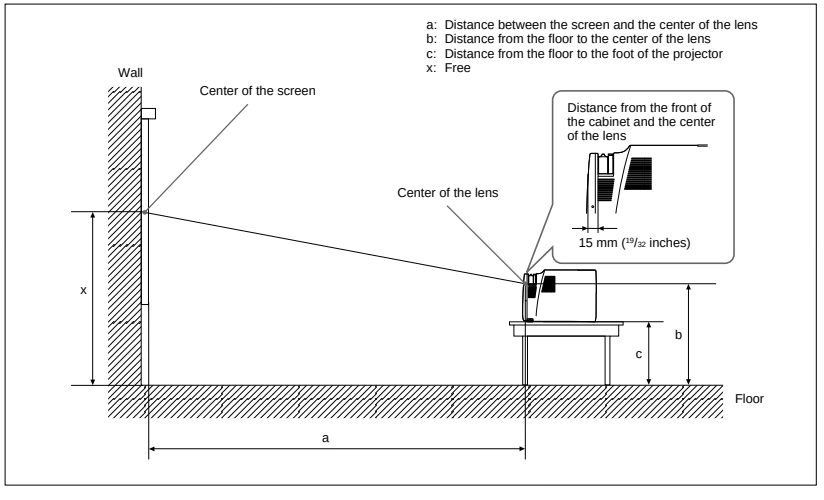
Selects the remote control detectors on the front and rear of the projector.



FRONT & REAR: Activates both the front and rear detectors.
FRONT: Activates the front detector only.
REAR: Activates the rear detector only.

Installation Example

You can not install the projector upside down, such as on a ceiling.
The on-screen picture size changes according to the input signal. Note that the projection distance also changes depending on the picture size.


a: Distance between the screen and the center of the lens
b: Distance from the floor to the center of the lens
c: Distance from the floor to the foot of the projector
x: Free
Wall
Center of the screen
Distance from the front of the cabinet and the center of the lens
Center of the lens
15 mm (19/32 inches)
x
b
c
Floor
a

Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150
a	Minimum	1410 (55 5/8)	2160 (85 1/8)	2900 (114 1/4)	3640 (143 3/8)	4390 (172 7/8)	5500 (216 5/8)
	Maximum	1630 (64 1/4)	2480 (97 3/4)	3320 (130 3/4)	4170 (164 1/4)	5020 (197 11/16)	6290 (247 3/4)
b		x–265 (x–10 1/2)	x–398 (x–15 3/4)	x–530 (x–20 7/8)	x–663 (x–26 1/8)	x–795 (x–31 3/8)	x–994 (x–39 1/4)
c		x–423 (x–16 3/4)	x–556 (x–22)	x–688 (x–27 1/8)	x–821 (x–32 3/8)	x–953 (x–37 5/8)	x–1152 (x–45 3/8)

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)
a (minimum) = {(SS × 32.83/0.9055) – 70.33} × 1.025
a (maximum) = {(SS × 39.393/0.9055) – 70.15} × 0.975
b = x – (SS/0.9055 × 6)
c = x – (SS/1.26 × 6 + 158.3)

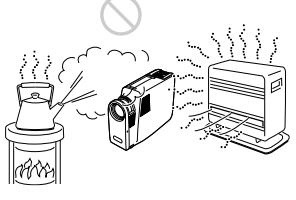
Unsuitable Installation

Do not install the projector in the following situations. These installations may cause malfunction or damage to the projector.

Poorly ventilated

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. When the internal heat builds up due to the block-up, the temperature sensor will function with the message “High Temperature! Power off in 1 min.” The power will be turned off automatically after one minute.
- Leave space of more than 30 cm (11 7/8 inches) around the unit.
- Be careful that the ventilation holes may inhale tininess such as a piece of paper.

Highly heated and humid



- Avoid installing the unit in a location where the temperature or humidity is very high, or temperature is very low.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.

Very dusty

Avoid installing the unit in a location where there is a lot of dust; otherwise, the air filter will be obstructed. The dust blocking the air through the filter may cause raising the internal heat of the projector. Clean it up periodically.

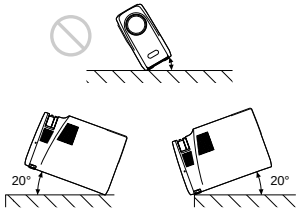
Notes on Installation

Carry out the followings.

No toppling of the unit

Avoid using as the unit topples over on its side. It may cause malfunction.

Use to be level



Do not install the unit other than on the floor.
Avoid using as the unit tilts to one side or tilts upward or downward more than 20 degrees. These installation may cause malfunction.

No blocking the ventilation holes

Avoid using something to cover over the ventilation holes; otherwise, the internal heat may build up.

Maintenance

Replacing the Lamp

When it is time to replace the lamp, replace the lamp promptly with a new LMP-600 Projector Lamp.

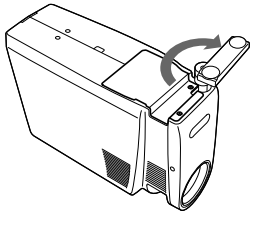
When replacing the lamp after using the projector
Turn off the projector, then unplug the power cord. Wait for at least an hour for the lamp to cool.

Note
The lamp will still be very hot after turning off the power. Wait until the lamp has cooled completely before replacing.

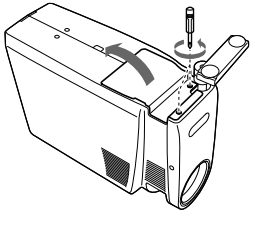
1 Place a protective sheet (cloth) beneath the projector. Turn the projector over so it is upside down.

Note
Be careful not to topple over the projector after turning it over.

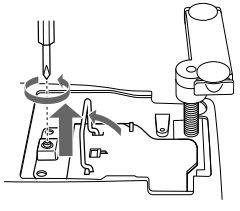
2 Pull out the adjuster by pressing the adjuster button and turn it outward.



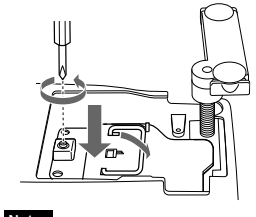
3 Open the lamp cover by loosening two screws with the Philips screwdriver (supplied with the LMP-600 Projector Lamp).



4 Loosen the screw on the lamp unit with the Philips screwdriver. Pull out the lamp unit by the handle.



5 Insert the new lamp all the way in until it is securely in place. Tighten the screw. Fold down the handle.



Notes
- Be careful not to touch the glass surface of the lamp.
- The power will not turn on if the lamp is not secured properly.

6 Close the lamp cover and tighten the screws.

7 Turn the adjuster inward and push it back.

8 Turn the projector back over.

9 Connect the power cord and turn the projector to the standby mode.

10 Press the following keys on the control panel in the following order for less than in five seconds each: LIGHT, ←, →, ENTER.

Maintenance

Notes

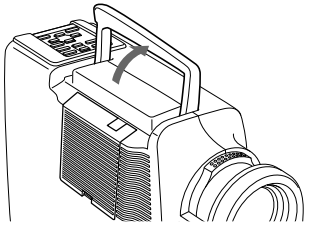
- The lamp becomes a high temperature after turnig off the projector with the I /⏻ key. If you touch the lamp, you may scald your finger. When you replace the lamp, wait for at least an hour for the lamp to cool.
- Be sure to use the LMP-600 Projector Lamp for replacement. If you use lamps other than LMP-600, the projector may cause a malfunction.
- Be sure to turn off the projector and unplug the power cord before replacing the lamp.
- Do not place the old lamp near children or near the objects which catch fire easily.
- Do not get wet the lamp or fall any liquid or object inside the lamp. The lamp may broken.
- Do not put your hands into the lamp replacement spot, or not fall any liquid or object into it to avoid electrical shock or fire.

Cleaning the Air Filter

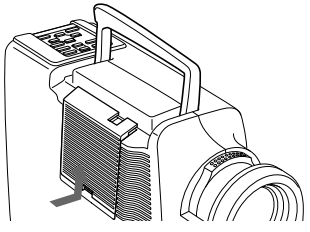
The air filter should be cleaned every 300 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.
To clean the air filter, follow the steps below:

1 Turn off the power and unplug the power cord.

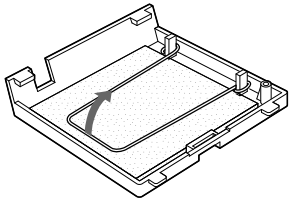
2 Pull up the carrying handle.



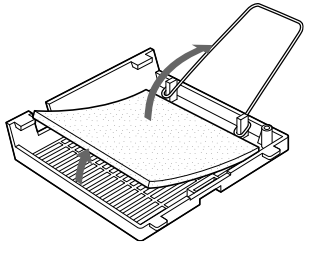
3 Press and hold the PUSH button and remove the air filter cover on the right side of the projector.



4 Pull up the spring.



5 Remove the air filter.



6 Remove the dust from the filter with a vacuum cleaner.

7 Attach the air filter and replace the cover.

Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem, using the following guide. If the problem still persists, consult with qualified Sony personnel.

Symptom	Cause	Remedy
The power is not turned on.	The power has been turned off and on with the I / ⏻ key at a short interval.	Wait for about 90 seconds before turning on the power *(see page 21 (EN)).*
	The lamp cover is detached.	Close the lamp cover securely *(see page 33 (EN)).*
	The air filter cover is detached.	Close the air filter cover securely *(see page 34 (EN)).*
No picture and no sound.	Cable is disconnected.	Check that the proper connections have been made *(see pages 18 (EN) to 20 (EN)).*
	Wrong connection.	Check that the proper connections have been made *(see pages 18 (EN) to 20 (EN)).*
	Input selection is incorrect.	Select the input source correctly using the INPUT key *(see page 21 (EN)).*
No picture or no sound.	Either the picture or the sound is cut off.	Press the MUTING keys to release the muting function *(see page 22 (EN)).*
No picture.	The computer signal is not set to output to external monitor.	Set the computer signal to output to external monitor *(see page 18 (EN)).*
	The computer signal is set to output to both the LCD of the computer and external monitor.	Set the computer signal to output only to external monitor *(see page 18 (EN)).*
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from the connector and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
When inputting sound through INPUT-A connector, sound comes through one channel only.	Monaural sound is being input through the INPUT-A connector.	Input stereo sound.
The picture from INPUT-A connector is colored strange.	The 15k RGB signal is input.	Input the correct signal. This unit does not accept the 15k RGB signal *(see page 28 (EN)).*
On-screen displays do not appear.	STATUS in the SET SETTING menu has been set to OFF.	Set STATUS in the SET SETTING menu to ON *(see page 29 (EN)).*
Color balance is incorrect.	Picture has not been adjusted properly.	Adjust the picture *(see pages 25 (EN) and 26 (EN)).*
	Projector is set to wrong color system.	Set COLOR SYS in the PICTURE CTRL menu to match the color system being input *(see page 26 (EN)).*
The picture is too dark.	Contrast or brightness has not been adjusted properly.	Adjust the contrast or brightness in the PICTURE CTRL menu properly *(see page 25 (EN)).*
The picture is not clear.	Picture is out of focus.	Adjust the focus *(see page 22 (EN)).*
	Condensation has occurred on the lens.	Leave the projector for about two hours with the power on *(see page 31 (EN)).*

(Continued)

Troubleshooting

Symptom	Cause	Remedy
The LAMP/COVER indicator flashes.	The lamp cover or the air filter cover is detached.	Attach the cover securely *(see pages 33 (EN) and 34 (EN)).*
The LAMP/COVER indicator lights up.	The lamp has reached the end of its life.	Replace the lamp *(see page 33 (EN)).*
	The lamp becomes a high temperature.	Wait for 90 seconds to cool down the lamp and turn on the power again *(see page 21 (EN)).*
The TEMP/FAN indicator flashes.	The fan is broken.	Consult with qualified Sony personnel.
The TEMP/FAN indicator lights up.	The internal temperature is unusually high.	Check to see if nothing is blocking the ventilation holes.
The Remote Commander does not work.	The Remote Commander batteries are dead.	Replace with new batteries *(see page 16 (EN)).*
	The COMMANDER ON/OFF switch is set to the OFF position.	Set the switch to ON position *(see page 16 (EN)).*
	The cable is connected to the CONTROL S OUT jack.	Disconnect the cable *(see page 16 (EN)).*
	The front/rear remote control detector is near the fluorescent lamp.	Change the setting of SIRCS RECEIVER in the SET SETTING menu *(see page 29 (EN)).*
The laser pointer is not emitted.	The batteries are dead.	Replace with new batteries *(see page 16 (EN)).*
	The Remote Commander is used as wired without batteries.	Install batteries *(see page 16 (EN)).*
The joystick, R CLICK, or L CLICK key does not function.	The mouse port on the computer does not recognize the mouse cable.	Restart the computer.

Warning messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
High Temperature! Power off in 1 min.	Internal temperature is too high.	Turn off the power. Check to see if nothing is blocking the ventilation holes.
Frequency is out of range!	This input signal cannot be projected as the frequency is out of the acceptable range of the projector.	Input a signal that is within the range of the frequency.
	The resolution setting of the output signal of a computer is too high.	Set the setting of output to the SVGA *(see page 18 (EN)).*

Caution messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
NO INPUT	No input signal	Check connections.
Not applicable!	You have pressed the wrong key.	Press the appropriate key.

Specifications

Optical characteristics

Projection system: 3 LCD panels, 1 lens, projection system
LCD panel: 0.9-inch TFT LCD panel, 1,440,000 pixels (480,000 pixels × 3)
Lens: 1.2 times zoom lens
f 32.8 to 39.4 mm/F 2.5 to 2.79
Lamp: 120 W UHP
Projection picture size
Range: 40 to 150 inches (diagonal measure)
Light output: ANSI lumen[1] 500 lm
Throwing distance (When the SVGA signal is input)
40-inch: 1410 to 1630 mm (55 5/8 to 64 1/4 inches)
60-inch: 2160 to 2480 mm (85 1/8 to 97 3/4 inches)
80-inch: 2900 to 3320 mm (114 1/4 to 130 3/4 inches)
100-inch: 3640 to 4170 mm (143 3/8 to 164 1/4 inches)
120-inch: 4390 to 5020 mm (172 7/8 to 197 11/16 inches)
150-inch: 5500 to 6290 mm (216 5/8 to 243 3/4 inches)

Electrical characteristics

Color system: $NTSC_{3.58}$/PAL/SECAM/$NTSC_{4.43}$/PAL-M system, switched automatically/manually
Resolution: 600 horizontal TV lines (Video input)
800 × 600 dots (RGB input)
Acceptable computer signals
fH: 24 to 57 kHz
fV: 43 to 85 Hz
Speaker: Stereo speakers system, 36 mm (1 7/16 inches) diameter, max. 0.5 W × 2

Input/Output

Video/audio input
VIDEO: phono type
Composite video: 1 Vp-p ±2 dB sync negative (75 ohms terminated)
S VIDEO: Y/C mini DIN 4-pin type (male)
Y (luminance): 1 Vp-p ±2 dB sync negative (75 ohms terminated)
C (chrominance): burst 0.286 Vp-p ±2 dB (NTSC) (75 ohms terminated), burst 0.3 Vp-p ±2 dB (PAL) (75 ohms terminated)
AUDIO: Phono type × 2
500 mVrms, impedance more than 47 kilohms

INPUT-A
INPUT A: HD D-sub15-pin (female)
Analog RGB/component:
R/R-Y: 0.7 Vp-p ±2 dB (75 ohms terminated)
G: 0.7 Vp-p ±2 dB (75 ohms terminated)
G with sync/Y: 1 Vp-p ±2 dB sync negative (75 ohms terminated)
B/B-Y: 0.7 Vp-p ±2 dB (75 ohms terminated)
SYNC/HD:
Composite sync input: 1-5 Vp-p high impedance, positive/negative
Horizontal sync input: 1-5 Vp-p high impedance, positive/negative
VD:
Vertical sync input: 1-5 Vp-p high impedance, positive/negative
MOUSE (output): 13-pin (female)
(For details, see "Pin assignment" on page 39 (EN).)
AUDIO: Stereo minijack
500 mVrms, impedance more than 47 kilohms

(Continued)

1) ANSI lumen is a measuring method of American National Standard IT 7.228.

Specifications

AUDIO OUT (variable out): stereo minijack
Max. 500 mVrms, impedance 5 kilohms
Safety regulations VPL-SC50U: UL1950, cUL (CSA C22.2 No.950), FCC Class A, IC Class A, DHHS
VPL-SC50E/SC50M: EN60 950 EN60825-1, CE, C-Tick

Laser beam

Laser type Class 2
Wavelength 670 nm
Output 1 mW

General

Dimensions 107 × 218 × 314 mm (4 1/4 × 8 5/8 × 12 3/8 inches) (w/h/d)
Mass Approx. 3.7 kg (8 lb 3 oz)
Power requirements
AC 100 to 120 V/ 220 to 240 V, 2A/0.9A, 50/60 Hz
Power consumption
Max. 190 W (Standby mode: 2 W)
Heat dissipation 648.37 BTU
Operating temperature
0°C to 40°C (32°F to 104°F)
Operating humidity
35% to 85% (no condensation)
Storage temperature
–20°C to 60°C (–4°F to 140°F)
Storage humidity 10% to 90%
Supplied accessories
Remote Commander RM-PJM600 (1)
Size AA (R6) batteries (2)
Video Signal Cable SMF-401 (1)
Signal Adapter (for Macintosh) (1)
Mouse Cable
SIC-S20 (for Macintosh) (2 m) (1)
SIC-S22 (for PS/2) (2 m) (1)
Audio/video cable (1.5 m) (1)
Strap for Remote Commander (1)
AC power cord (1)
Air filter (for replacement) (1)
Operating Instructions (1)
Quick Reference Card (1)
Warranty Card (1) (only for VPL-SC50U)

Design and specifications are subject to change without notice.

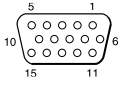
Optional accessories

Projector Lamp LMP-600[1)] (for replacement)
Carrying Case VLC-SC50[1)]
Signal Selector IFU-SC50
Video Signal Cable SMF-401 (HD D-sub 15-pin (male) ⟷ HD D-sub 15-pin (male))
Signal Cable
SMF-402 (HD D-sub 15-pin (male) ⟷ 3 × phono type (male))
Mouse Cable
SIC-S20 (for Macintosh) (2 m)
SIC-S21 (for Serial) (2 m)
SIC-S22 (for PS/2) (2 m)
Signal Adapter
ADP-10 (HD D-sub 15-pin ⟷ D-sub 9-pin (for SIC cable))
ADP-20 (Macintosh ⟷ HD D-sub 15-pin)
SIC cable
SIC-20A/20C/21/22
Screens
80-inch Portable VPS-80C
100-inch Flat Screen VPS-100FH
120-inch Flat Screen VPS-120FH

Some of the items may not be available in some areas. For details, please consult your nearest Sony office.

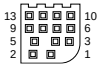
Pin assignment

INPUT A connector (HD D-sub 15-pin, female)



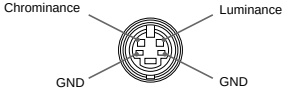
1	R/R-Y	9	N.C.
2	G/Y	10	GND
3	B/B-Y	11	GND
4	GND	12	N.C.
5	GND	13	HD/C.Sync
6	GND (R)	14	VD
7	GND (G)	15	N.C.
8	GND (B)		

MOUSE connector (13-pin, female)



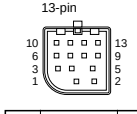
1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

S VIDEO jack (4 pin, mini-DIN)

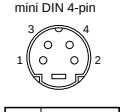


Mouse cable pin assignment

SIC-S20

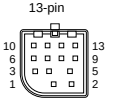


1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

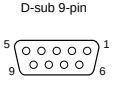


1	ADB
2	NC
3	+5V
4	GND

SIC-S21 (not supplied)

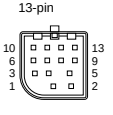


1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

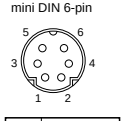


1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

SIC-S22

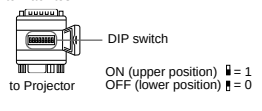


1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		



1	DATA
2	NC
3	GND
4	+5V
5	CLOCK
6	NC

Switch position for signal adapter



Mode	fH	DIP switch 12345678
VGA/S VGA	31.5 kHz/37.8 kHz	00111001
Macintosh 13”	35.0 kHz	11001001
Macintosh 16”	49.7 kHz	01011001

1) LMP-600 and VLC-SC50 may not be available in some areas. For details, please consult your nearest Sony office.

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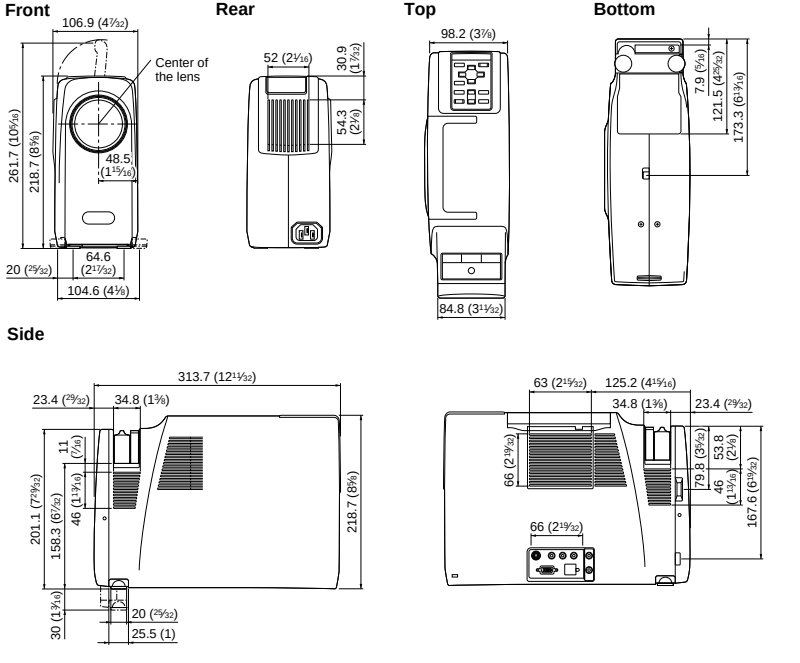
Specifications

Dimensions



Unit: mm (inches)

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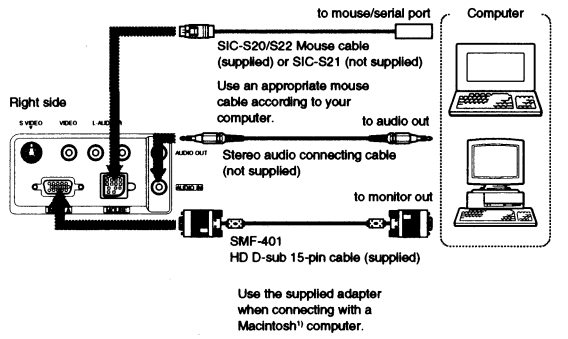
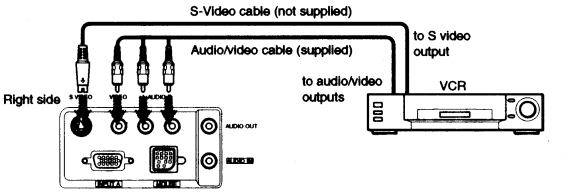
■ Connections ■

Connecting with a computer



Connecting with a VCR



1) Macintosh is a registered trademark of Apple Computer, Inc.

SONY. VPL-SC50U/E/M

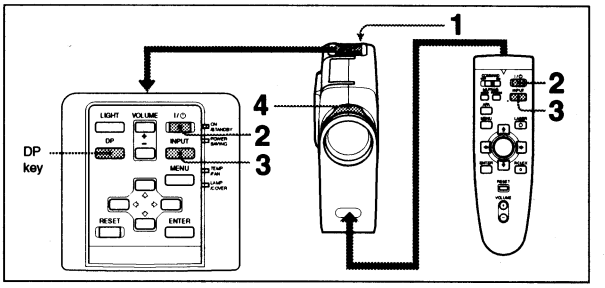
Quick Reference Card

■ Projection Distances ■

The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide. (when the SVGA signal is input)

Screen size (inches)		40	60	80	100	120	150
Distance (m (feet))	Minimum	1.4 (4.6)	2.2 (7.1)	2.9 (9.5)	3.6 (11.9)	4.4 (14.4)	5.5 (18.1)
	Maximum	1.6 (5.4)	2.5 (8.1)	3.3 (10.9)	4.2 (13.7)	5.0 (16.5)	6.3 (20.6)

■ Basic Operation ■



1 After all equipment is connected completely, plug the AC power cord into the wall outlet.

2 Press the I / ⏻ key to turn on the projector.

3 Turn on equipment connected to the projector. Press the INPUT key to select the input source.

4 Turn the focus ring to adjust the focus, and turn the zoom ring to adjust the size of the picture.

To get the clearest picture

You can adjust the dot phase when a signal from the computer is input.
Press the DP key, then the ♦/♦ key to adjust the dot phase.

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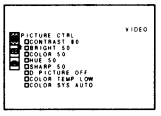
4-066-538-11 (1)

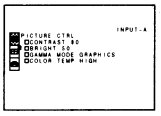
■ Menu Functions ■

● **PICTURE CTRL menu:** Adjusts picture settings.

When the video signal is input



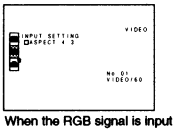
When the RGB signal is input



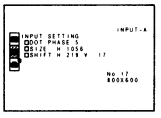
CONTRAST:	Adjusts picture contrast.
BRIGHT:	Adjusts picture brightness.
COLOR:	Adjusts color intensity.
HUE:	Adjusts skin tones.
SHARP:	Adjusts picture sharpness.
D. PICTURE:	Emphasizes the black color.
GAMMA MODE:	Selects a gamma correction curve.
COLOR TEMP:	Adjusts the color temperature.
COLOR SYS:	Selects color system of the input signal.

● **INPUT SETTING menu:** Adjusts the input signal settings.

When the video signal is input

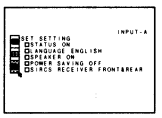


When the RGB signal is input



DOT PHASE:	Adjusts the dot phase of the LCD panel and the signal input from the INPUT A connectors.
SIZE:	Adjusts the horizontal size of pictures input from the INPUT A connectors.
SHIFT:	Adjusts the position of the picture input from the INPUT A connectors.
ASPECT:	Sets the aspect ratio of the picture.

● **SET SETTING menu:** Changes the projector settings.



STATUS:	Selects the on-screen information to be displayed.
LANGUAGE:	Selects the language used in the menu and on-screen displays.
SPEAKER:	Cuts off the sound of internal speakers.
POWER SAVING:	Switches projector to power saving mode.
SIRCS RECEIVER:	Selects the remote control detectors on the front and rear of the projector.

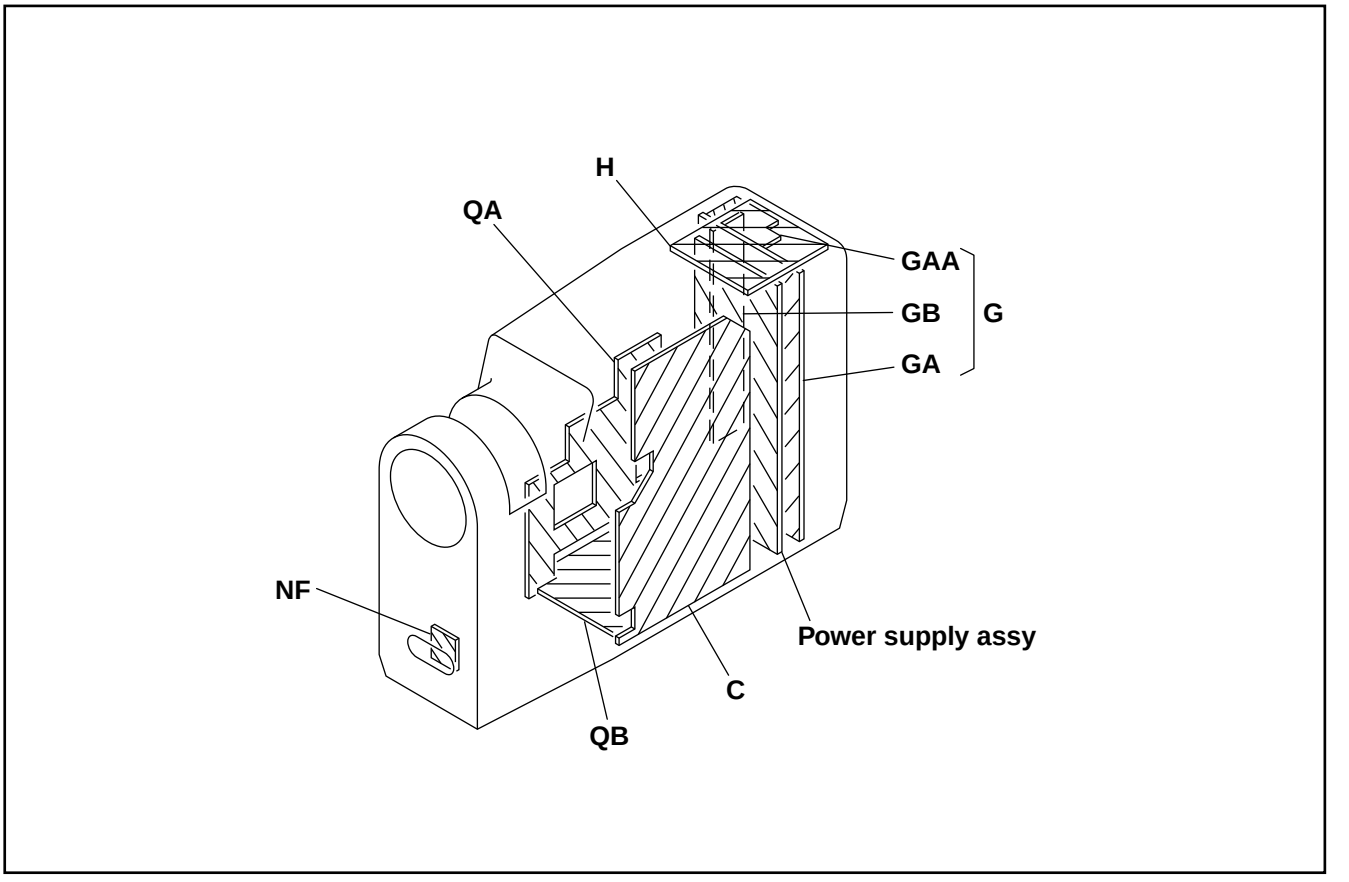
■ Basic Menu Operation ■

To display the menu, press the MENU key.

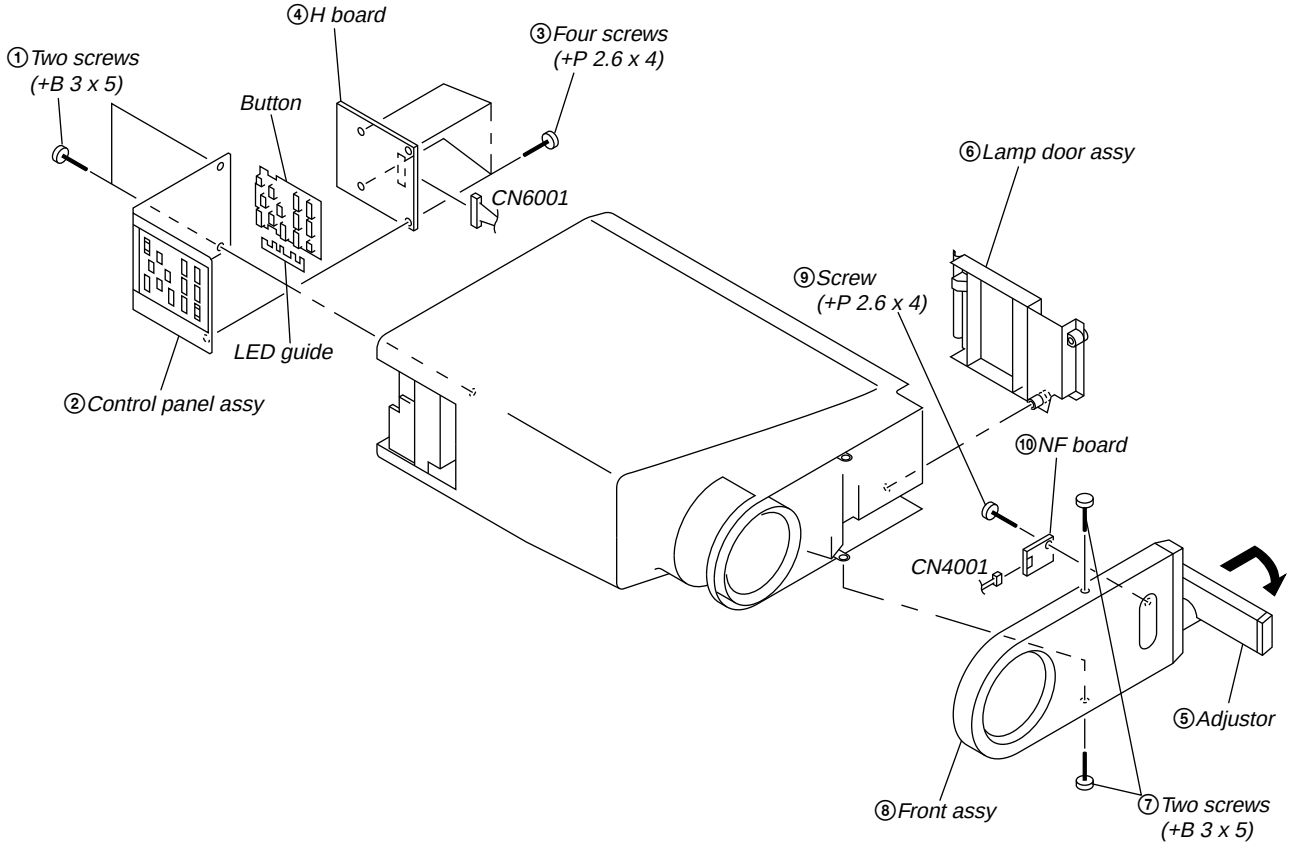
To	Control panel or Remote Commander key
Select a menu	Use the ♦/♦ keys to select a menu, then press the ENTER or ♦ key.
Select an item	Use the ♦/♦ keys to select an item, then press the ENTER or ♦ key.
Change an adjustment level	Use the ♦/♦ keys to increase the number. Use the ♦/♦ keys to decrease the number. Then, press the ENTER key.
Change a setting	Use the ♦/♦ keys to select the setting. Then, press the ENTER or ♦ key.

SECTION 2
SERVICE INFORMATIONS

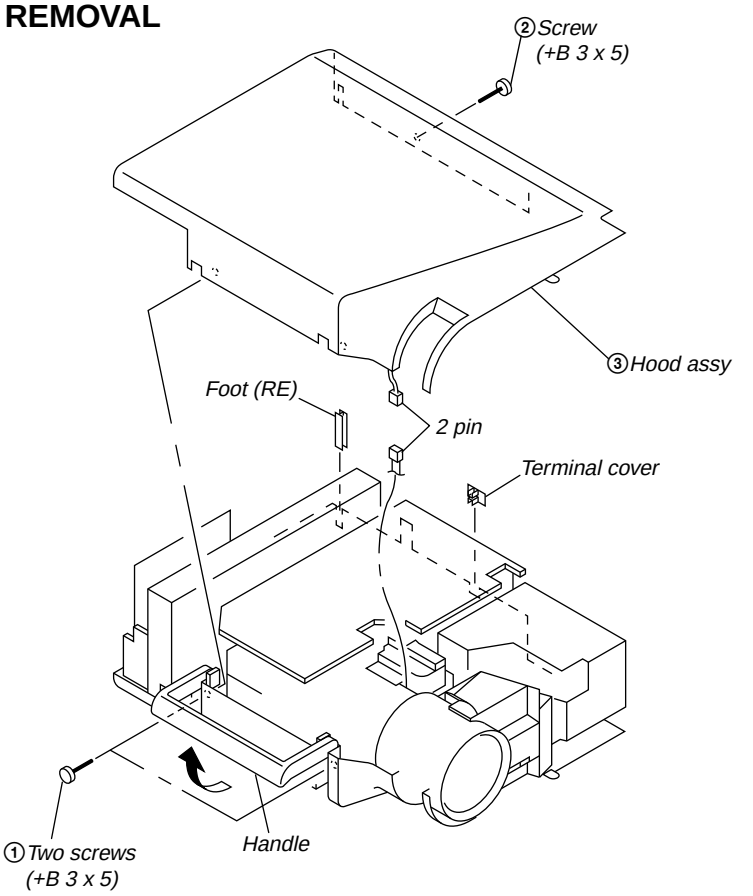
2-1. CIRCUIT BOARDS LOCATION



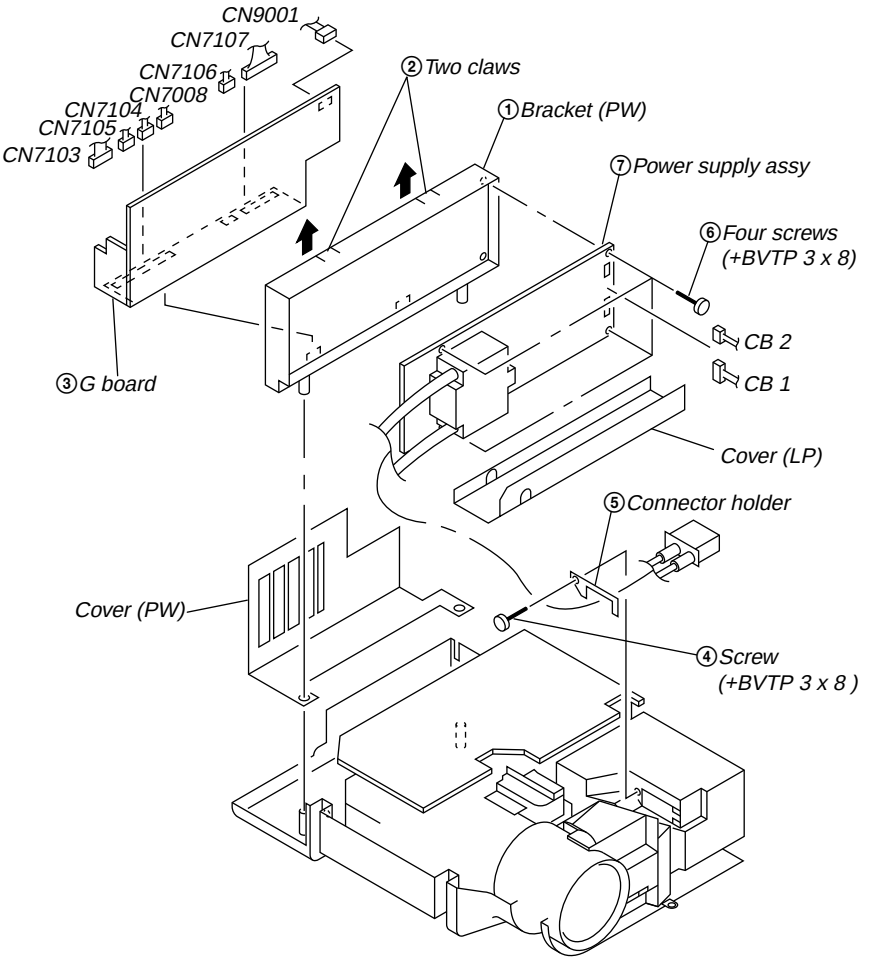
2-2. H AND NF BOARDS REMOVAL



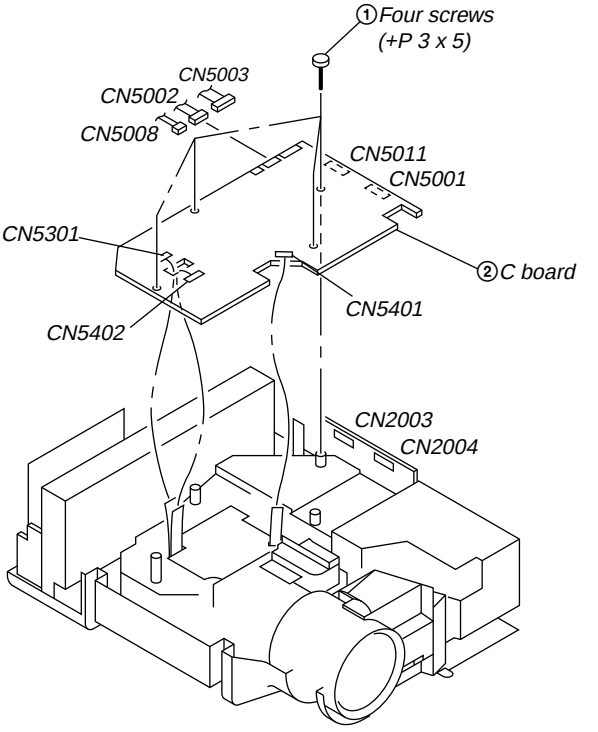
2-3. HOOD ASSY REMOVAL



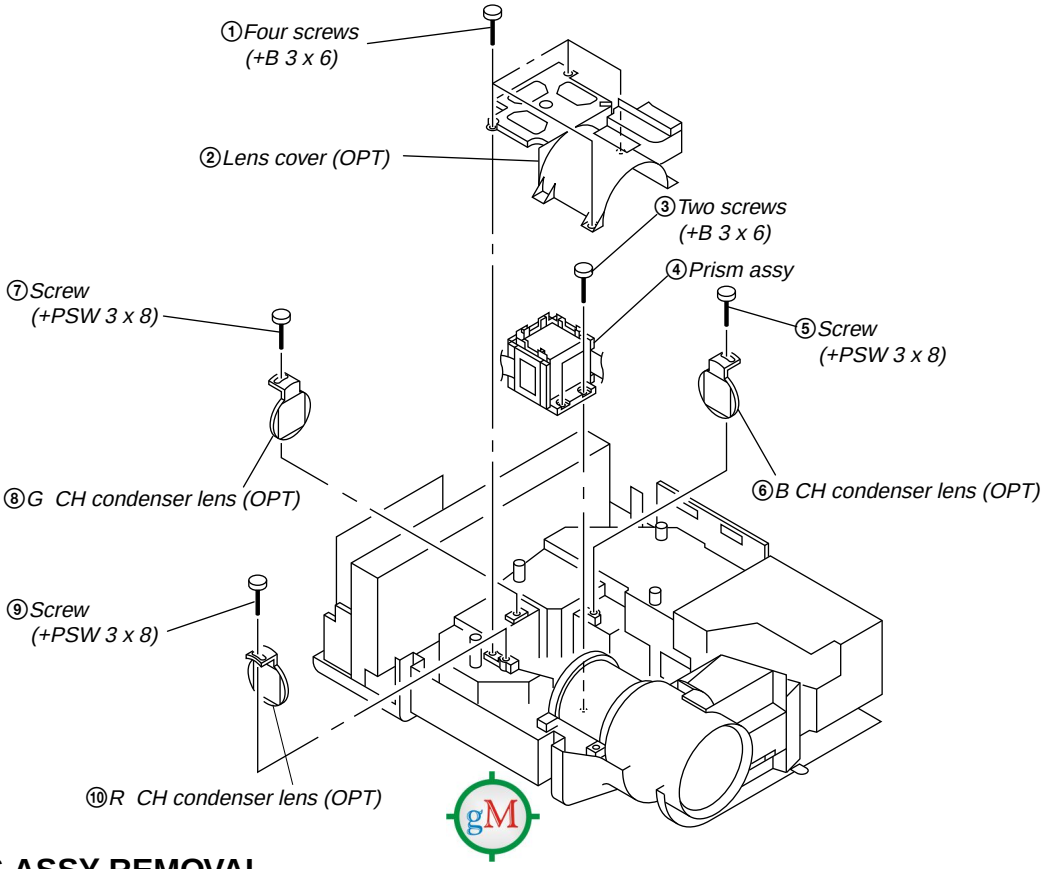
2-4. G BOARD AND POWER SUPPLY ASSY REMOVAL



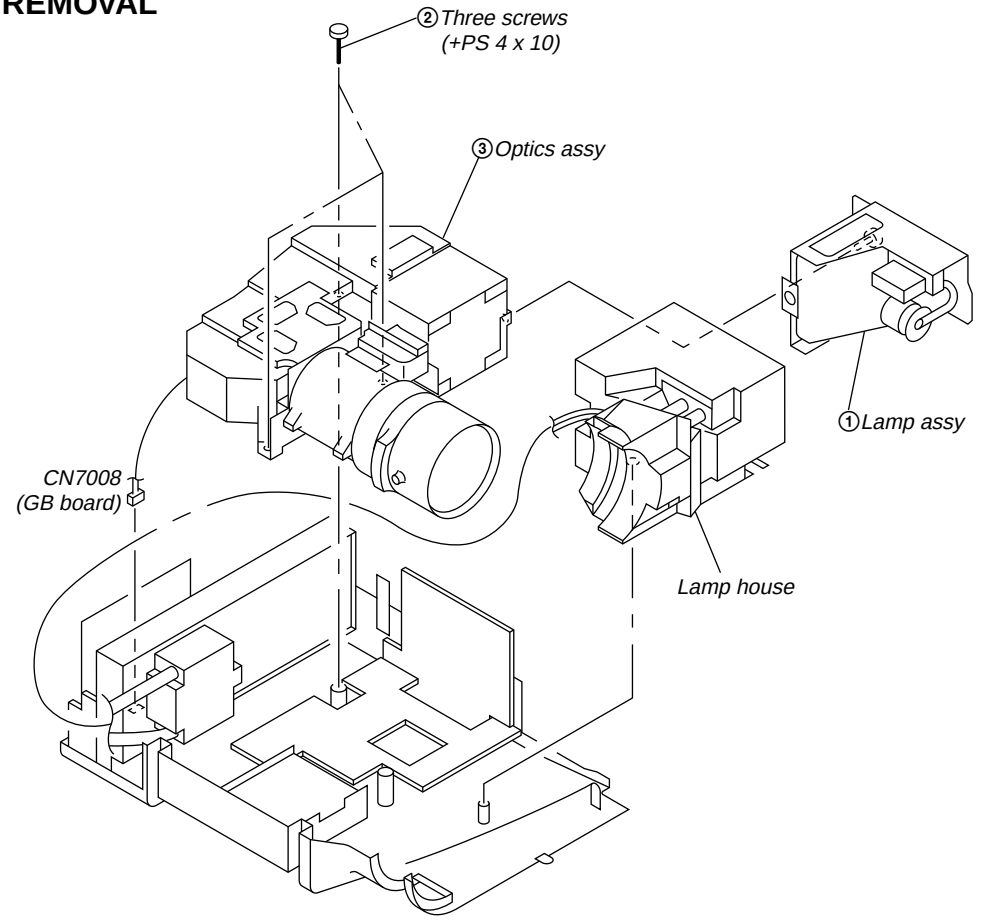
2-5. C BOARD REMOVAL



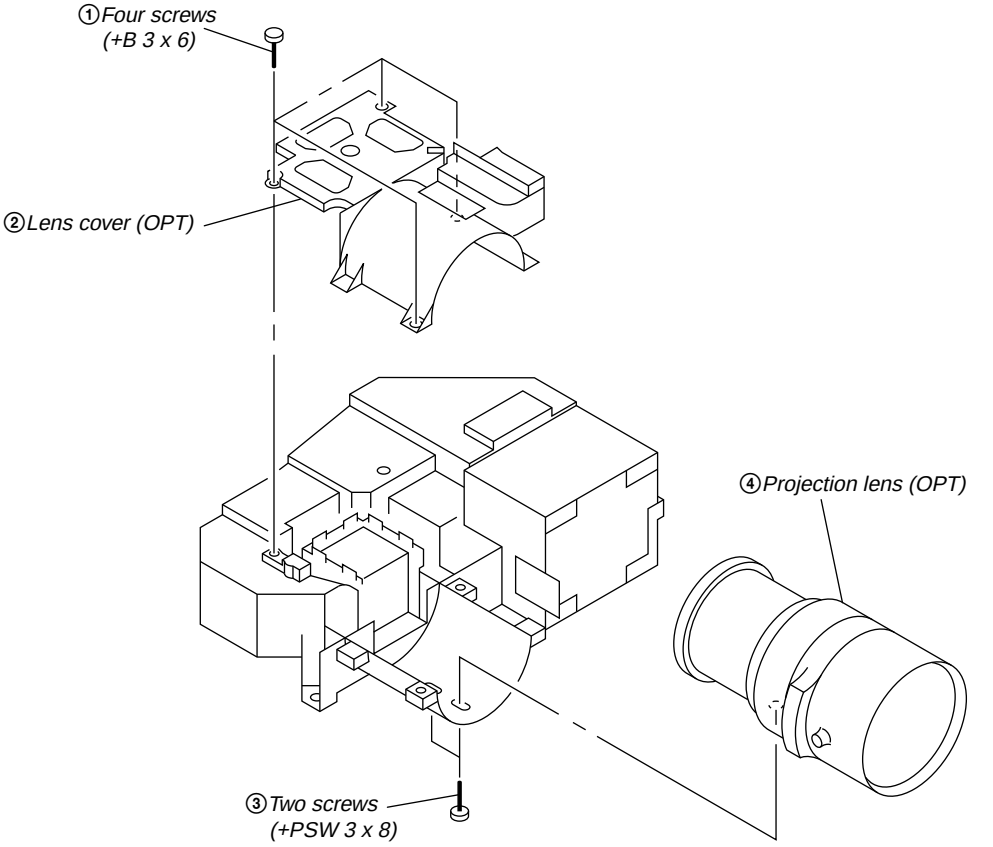
2-6. PRISM ASSY AND R/G/B CH CONDENSER LENS REMOVAL



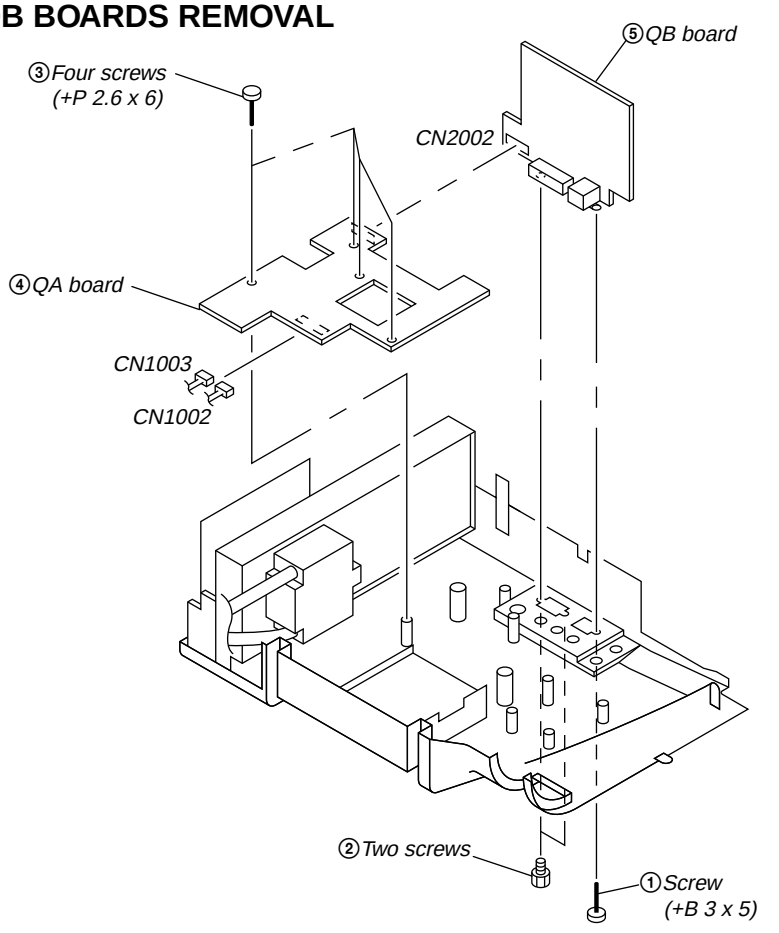
2-7. OPTICS ASSY REMOVAL



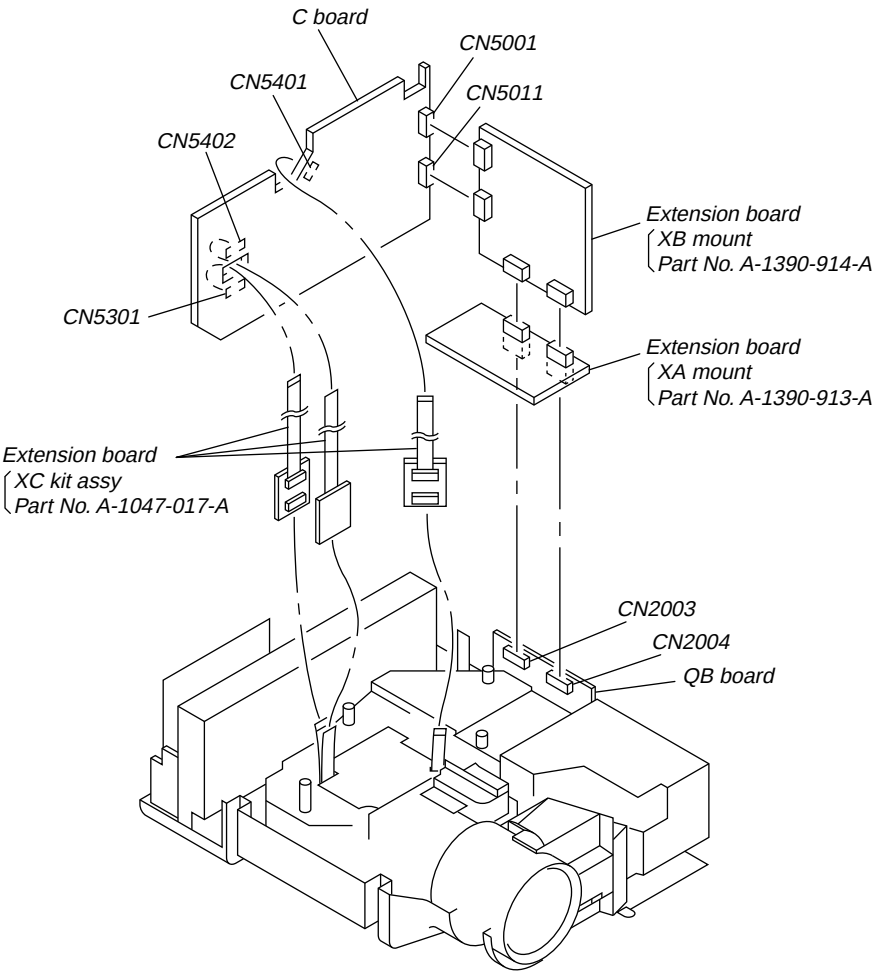
2-8. PROJECTION LENS REMOVAL



2-9. QA AND QB BOARDS REMOVAL



2-10. SERVICE POSITION
(EXTENSION CABLE CONNECTION)



SECTION 3
SET-UP ADJUSTMENTS

3-1. PREPARATIONS

3-1-1. Setting the Factory Mode

1. Check that the STATUS is ON in MENU.
2. Exit MENU.
3. Press the keys in the following order;
   "ENTER" → "ENTER" → "LEFT" → "ENTER".
4. The message "Do you wish to enter into the FACTORY MODE?" will be displayed.
5. Select YES.

3-1-2. Equipment Used

1. Oscilloscope
2. Luminance meter
3. Color analyzer

3-2. VCOM ADJUSTMENT

1. Input the green-only 1H inverted signal to INPUT-A.
2. Set CONTRAST:50, BRIGHT:50.
   (Use the setting which allows the adjustment to be carried out most easily.)
3. The screen for adjusting the G VCOM of "Device Adjust" will appear.
   Adjust to the point where flicker is minimum.
4. Input the red-only and blue-only 1H inverted signal, and adjust R VCOM and B VCOM respectively so that flicker becomes minimum.
5. Memorize the adjustment value.

3-3. SIGNAL LEVEL ADJUSTMENT

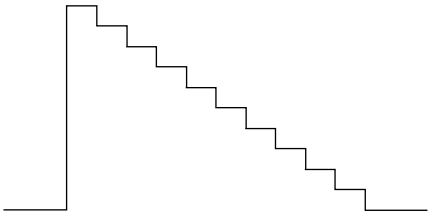
Set as follows;

GAMMA MODE:GRAPHICS, W/B:LOW mode
INPUT-A:10 steps, VIDEO:100% COLOR BAR
CONTRAST:80, BRIGHT:50 (initial value).

3-3-1. RGB Level Adjustment

1. Adjust W/B, R, G, B GAIN and W/B R, G, B BIAS so that the levels of TP5202, TP5205 and TP5206 satisfy the specifications.
2. Memorize the adjustment values.

RGB LEVEL SPEC
Set TP5202, TP5205, and TP5206 as follows;
0IRE 2.00 ± 0.02 Vdc
100 IRE 3.00 ± 0.02 Vdc



3-3-2. VIDEO Level Adjustment

1. Switch the input to INPUT-A, input 15k Component 100% COLOR BAR, and set COLOR to MIN.
2. Input the Component 100% COLOR BAR to INPUT-A.
3. Adjust W/B, R, G, B GAIN and W/B R, G, B BIAS so that the levels of TP5202, TP5205 and TP5206 satisfy the specifications.
4. Memorize the adjustment values.
   For 15k Component, as using the following inputs;
   Y=0.7V ped to 100 IRE
   R-Y/B-Y=0.7 Vpp
5. Return COLOR to 50 (initial value).
6. Switch the input to VIDEO, input NTSC 100% COLOR BAR, and set COLOR to MIN. And then adjust and memorize the value.
7. Input the NTSC 100% COLOR BAR to VIDEO.
   Adjust RGB MTRX CONTRAST/BRIGHT so that the level of TP5206 satisfies the specification.
   Memorize the adjustment value.
8. Input the PAL 100% COLOR BAR to VIDEO.
   Adjust RGB MTRX CONTRAST/BRIGHT so that the level of TP5206 satisfies the specification.
   Memorize the adjustment value.
9. Return COLOR to 50 (initial value).

VIDEO LEVEL SPEC
Set TP5202, TP5205, and TP5206 as follows;
0IRE 2.00 ± 0.02 Vdc
100 IRE 3.00 ± 0.02 Vdc

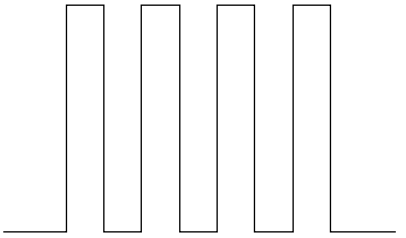
Note)
Do not change RGB MTRX VIDEO CON, YUV CON.

3-3-3. VIDEO SUB HUE COLOR Adjustment

Set COLOR to 40 beforehand and perform offset adjustment. (Set both INPUT-A and VIDEO to COLOR 40.)

1. Adjust RGB MTRX SUB HUE to b=c so that the level of TP5206 satisfies the specification.
   Adjust RGB MTRX VIDEO COL or YUV COL to a=d.
   Perform tracking adjustment for the two items above.
2. Memorize the adjustment value.
3. Adjust NTSC, PAL, and Component.
   Adjust only VIDEO COL for PAL.
   Adjust only VIDEO COL for Component.

VIDEO COLOR HUE Adjustment SPEC



TP5206 : a=b ± 10%

3-4. γ W/B ADJUSTMENT

INPUT-A:SVGA FLAT FIELD, 15k Component FLAT FIELD, (NTSC, PAL can be used instead of 15k Component).

(Note 1) Perform pre-aging of the unit for more than 5 minutes in the all white state.

(Note 2) Perform the above adjustment with the lens set to WIDE end.

(Note 3) Be sure to turn off the OSD when measuring the chromaticity.

The W/B MEMORY consists of two modes-HIGH and LOW for both the RGB and VIDEO inputs.

3-4-1. γ Adjustment

3-4-1-1. Graphics Mode Adjustment

1. Set γ MODE to Graphics to set HIGH MODE.
2. Input SVGA FLAT FIELD 100 IRE to INPUT-A.
3. Copy the LOW MODE data to HIGH MODE and memorize the data.
4. Set CONTRAST:MAX and BRIGHT:MAX.
   Measure the chromaticity (Xw, Yw).
5. Input the green-only SVGA FLAT FIELD 100 IRE.
6. Measure the brightness Ygmax.
7. Set CONTRAST:80, BRIGHT:50 (initial value).
8. Input the green-only FLAT FIELD 80 IRE to INPUT-A.
   Adjust CXA2111/G SBRT so that the brightness 80 satisfies the specification.
   Brightness adjustment specification (take the average of five measurements as the brightness)
   Y80=Ygmax x 0.680 ± 4%
9. Input the green-only FLAT FIELD 40 IRE to INPUT-A.
   Adjust CXA2111/G GAIN so that the brightness Y40 satisfies the specification.
   Y40=Y80 x 0.218 ± 4%
10. Input the SVGA green-only FLAT FIELD 20 IRE to INPUT-A.
    Adjust CXA2111/G B1P so that the brightness Y20 satisfies the specification.
    Y20=Y80 x 0.0474 –3% to +7%
11. Input the SVGA FLAT FIELD 80 IRE to INPUT-A.
    Adjust CXA2111/R SBRT, B SBRT so that the chromaticity at this time (white) satisfies the specification.
    Specification;
    80 IRE (Xw ± 0.005, Yw+0 to –0.010)

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12. Input the SVGA FLAT FIELD 40 IRE to INPUT-A. Adjust CXA2111/R GAIN, B GAIN so that the chromaticity at this time (white) satisfies the specification. Specification; 40 IRE (Xw ± 0.005, Yw+0 to –0.010)
13. Perform tracking adjustment so that both 80 IRE and 40 IRE satisfy the specification.
14. Input the SVGA FLAT FIELD 20 IRE to INPUT-A. Adjust CXA2111/R B1P, B B1P so that the chromaticity at this time (white) satisfies the specification. Specification; 20 IRE (Xw ± 0.005, Yw+0 to –0.010)
15. Memorize the adjustment value.

3-4-1-2. Text Mode Adjustment

1. Set γ MODE to Text.
2. Perform the following processes on the value adjusted in the Graphics Mode (3-4-1-1) and copy the value.

   CXA2111/SBRT:
   Adjustment value in Graphics Mode –5 (Red)
   Adjustment value in Graphics Mode –5 (Green)
   Adjustment value in Graphics Mode –5 (Blue)
   CXA2111/GAIN:
   Adjustment value in Graphics Mode –30 (Red)
   Adjustment value in Graphics Mode –30 (Green)
   Adjustment value in Graphics Mode –30 (Blue)
   CXA2111/B1P:
   Adjustment value in Graphics Mode (Both R/G/B)
   CXA2111/B2P:
   Adjustment value in Graphics Mode (Both R/G/B)

3. Memorize the adjustment value.
   When minimum IIR/G/B value is <30;
   Minimum of adjustment value –R/G/B in the graphics mode.

3-4-2. RGB W/B Low Mode Adjustment

1. Input the SVGA signal to the INPUT-A.
2. Set γ MODE to Graphics.
3. The LOW MODE is set.
4. Perform the following processes on LOW adjustment value.

   M52337/R GAIN:Adjustment value in LOW Mode +5
   M52337/G GAIN:Adjustment value in LOW Mode –5
   M52337/B GAIN:Adjustment value in LOW Mode +5
   M52337/R BIAS:Adjustment value in LOW Mode As it is
   M52337/G BIAS:Adjustment value in LOW Mode –3
   M52337/B BIAS:Adjustment value in LOW Mode As it is

5. Memorize the adjustment value.

3-4-3. Video W/B Adjustment

3-4-3-1. High Mode

1. Input the 15k Component signal to INPUT-A.
2. The HIGH MODE will be set.
3. Perform the following processes on the LOW adjustment value, and copy the value to the HIGH MODE.

   M52337/R GAIN:Adjustment value in LOW Mode –5
   M52337/G GAIN:Adjustment value in LOW Mode –5
   M52337/B GAIN:Adjustment value in LOW Mode –5
   M52337/R BIAS:Adjustment value in LOW Mode As it is
   M52337/G BIAS:Adjustment value in LOW Mode As it is
   M52337/B BIAS:Adjustment value in LOW Mode As it is

4. Input the 15k Component Flat Field 80 IRE to INPUT-A.
5. Lower G GAIN, and adjust the Y value to this value.
6. Take Blue as the reference if the X value is greater than the specification, and RED as the reference when smaller.
7. Adjust to the following chromaticity at GAINs other than the reference color.
8. Memorize the adjustment value.
9. Input the 15k Component Flat Field 20 IRE to INPUT-A.
10. Adjust to the following chromaticity at BIASs other than the reference color.
11. Perform tracking adjustment so that 80IRE and 20IRE satisfy the specification.
12. Memorize the adjustment value.

    HIGH MODE chromaticity specification:
    (x,y)=(0.275, 0.312) ± 0.005

3-4-3-2. Low Mode

1. Input the 15k Component signal to INPUT-A.
2. Set LOW MODE.
3. Perform the following processes on the LOW adjustment value.

   M52337/R GAIN:Adjustment value in LOW Mode –5
   M52337/G GAIN:Adjustment value in LOW Mode –5
   M52337/B GAIN:Adjustment value in LOW Mode –5
   M52337/R BIAS:Adjustment value in LOW Mode As it is
   M52337/G BIAS:Adjustment value in LOW Mode As it is
   M52337/B BIAS:Adjustment value in LOW Mode As it is

4. Input the 15k Component Flat Field 80 IRE to INPUT-A.
5. Lower G GAIN, and adjust the Y value to this value.
6. Take Blue as the reference if the X value is greater than the specification, and RED as the reference when smaller.
7. Adjust to the following color at GAINs other than the reference color.
8. Memorize the adjustment value.
9. Input the 15k Component Flat Field 20 IRE to INPUT-A.
10. Adjust to the following color at BIASs other than the reference color.
11. Perform tracking adjustment so that 80IRE and 20IRE satisfy the specification.
12. Memorize the adjustment value.
    LOW MODE chromaticity specification:
    (x,y)=(0.283, 0.331) ± 0.005

3-5. ADJUSTMENT ITEM INITIALIZE DATA

Device Name	Item Name	Memory Name														Remarkers
		SET MEMORY	SIGNAL MEMORY			GAMMA MEMORY		ASPECT MEMORY								
			NTSC	PAL/ SACAM	YUV	GRAPH	TEXT	VIDEO60		VIDEO50		YUV60		YUV50		
								4:3	16:9	4:3	16:9	4:3	16:9	4:3	16:9	
RGB MTRX	CONTRAST		37	37	37											
	BRIGHT		24	24	24											
	SUB HUE		7	7	7											
	SUB BRT		7	7	7											Fixed value
	R-Y/R		5	13	11											
	R-Y/B		12	15	13											
	G-Y/R		9	11	6											
	G-Y/B		8	7	5											
	VIDEO CON		3	3	3											
	VIDEO COL		7	7	7											
	YUV CON															Fixed value
	YUV COL															
	SUB SHP		3	1	0											
	SHPF0		2	1	3											
	PRE OVER															
	NR LVL															
	DMIC PIC	2														
	CEC LVL		3	3	2											
D.COM	VENH	1														
	CBPF															
C.DEC P.DRV	Y DELAY															
	G VCOM	89														
	R VCOM	177														
	B VCOM	229														
	SID LVL	70														Fixed value
GAMMA	G-SBRT					26	21									
	R-SBRT					27	22									
	B-SBRT					33	28									
	G GAIN					37	7									
	R GAIN					48	18									
	B GAIN					32	2									
	G B2G					63	63									Fixed value
	G B2P					52	52									
	G B1G					32	32									
	G B1P					37	37									
	G WHG					32	32									Fixed value
	G WHP					31	31									
	R B2G					63	63									
	R B2P					52	52									
	R B1G					32	32									
	R B1P					35	35									
	R WHG					32	32									Fixed value
	R WHP					31	31									
	B B2G					63	63									
	B B2P					50	50									
	B B1G					32	32									
	B B1P					31	31									
	B WHG					32	32									Fixed value
	B WHP					31	31									
	GAMMA OFF															
TG	HST	1														
	PCG	14														
	PRG	20														
	CLP	0														
	X3D															
	FRP	3														
	INST DOWN	0														
	INST RIGHT	1														
	GAMMA SH1					0	0									
SC	H SHIFT							121	151	194	200	121	162	192	193	
	V SHIFT							20	22	24	18	20	22	24	18	
	H PHASE							21	28	79	70	27	23	84	70	
	V PHASE							11	154	14	143	860	154	14	143	
	H OUT SIZE							860	820	1020	1020	908	820	1020	1020	
	H IN SIZE							908	908	1038	1065	908	908	1038	1065	
	LINE DATA0															
	CONV MODE0															
	TOP BLANKING							16	155	20	160	16	158	20	160	
	BOTTOM BLANKING							105	94	109	100	105	94	109	100	
	LEFT BLANKING															
	RIGHT BLANKING															
	IO PO TO P3															

Menu Title	Item name	Memory Name											Remarkers
		CH MEMORY		STATUS MEMORY					VIDEO (15k Component/HDTV)		RGB		
				VIDEO		15k Component		RGB					
		VIDEO	INPUT-A	60	50	60	50		HIGH	LOW	HIGH	LOW	
PICTURE CTRL	CONTRAST	80	80										
	BRIGHT	50	50										
	COLOR	50	(50)										
	HUE	50	(50)										
	SHARP	50	(50)										
	D.PICTURE	OFF	—										
	GAMMA MODE	—	GRAPHICS										
	COLOR TEMP	LOW	HIGH										
	COLOR SYS	AUTO	—										
INPUT SETTING	ASPECT			4:3	4:3	4:3	4:3	—					
	DOT PHASE			Status	Status	Status	Status	Status					
	SIZE H			↓	↓	↓	↓	↓					
	SHIFT H			↓	↓	↓	↓	↓					
	SHIFT V			↓	↓	↓	↓	↓					
SET SETTING	STATUS	ON											
	LANGUAGE	ENGLISH											
	SPEAKER	ON											
	POWER SAVING	OFF											
	SIRCS RECEIVER	FRONT&REAR											
W/B ADJUST	GAIN R								90	90	90	90	
	G								90	90	90	90	
	B								90	90	90	90	
	BIAS R								200	200	200	200	
	G								200	200	200	200	
	B								200	200	200	200	

* The “DOT PHASE, SIZE H, and SHIFT H/V” item in the INPUT SETITNG menu have initial values for each input signal (PRESET MEMORY No.).

* The “DOT PHASE/SIZE/SHUFT” item can be adjusted only in the service mode for the VIDEO 50/60 and 15k Component 50/60 signal.

<DOT PHASE Adjustment>

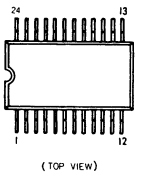
Adjusting method:Remote control “DP” key + “ARROW” key/display method:1 line

<SIZE/SHIFT Adjustment>

Adjusting method/display method:Menu (Same as RGB signal)

SECTION 4
SEMICONDUCTORS

BA7657F-E2



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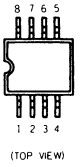
LTC1624ISB-E2
MC100ELT20DR2
MM1111XFBE
TC4W53FU
TC7W00FU
TC7W04FU
TC7W08FU
TC7W126FU
TL431BCDR2



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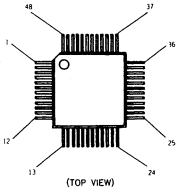
CXD1178Q-T6
CXD2064Q



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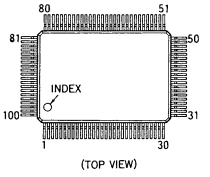

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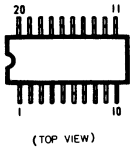

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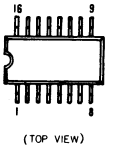
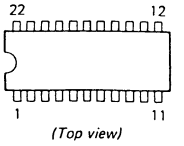
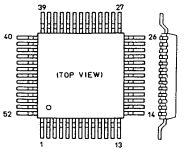
TC74VHC221AF
TDA4665T



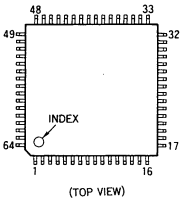
CXA2016S



CXA2111R



CXA2112R-T6
CXD2464R-T6
TLC5733AIPM



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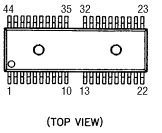

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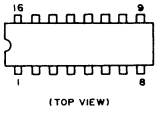

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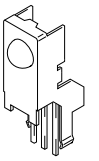

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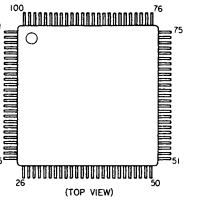
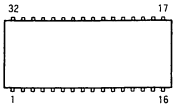


M52337SP



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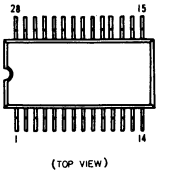

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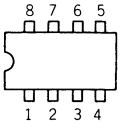
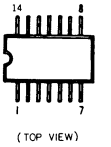


PC74HC02D-T
PC74HC74D-T
TC74HC07AF
TC74VHC04FS
TC74VHC08FS
TLC2932IPW



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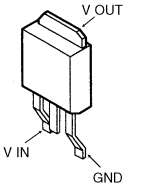
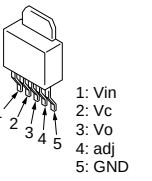
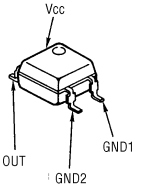


PQ20VZ1U
PQ20VZ5U



RS-140-T



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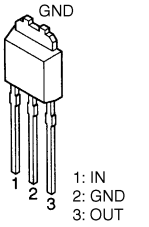
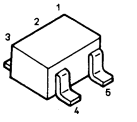
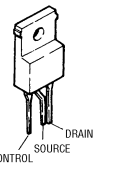
TA78M09F



TC7S04FU
TC7S08FU
TC7S32FU



TOP222Y-BB
TOP223Y-BB



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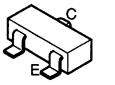

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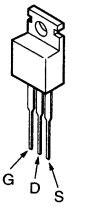

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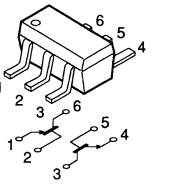

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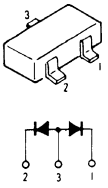
DAP202K-T-146



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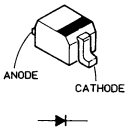
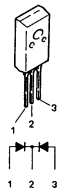
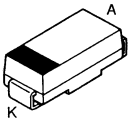
RB501V-40TE-17
RD12SB3-T1
RD3.3SB2-T1
RD5.1SB-T1
RD5.6SB-T1
RD9.1SB2-T1



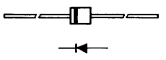
D10SC9M



D1FL20U-TA
D1FS4A-TA



D2S4M



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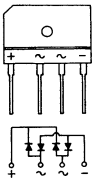

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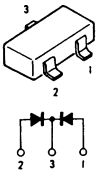

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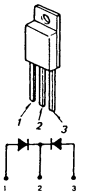

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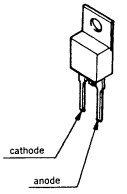
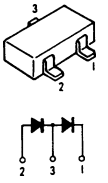
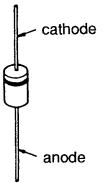
FSF10A60



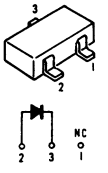
MA157-TX



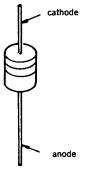
P6KE200A
P6KE350A



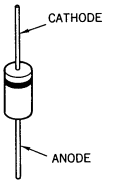
RD12M-T1B2



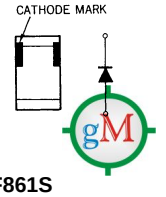
RD6.8SB2-T1



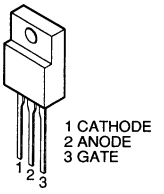
RGP10G
RGP10J



SEC1201C
SEC1401C
SEC1801C
SEC1901C
SEC2422C



TF861S



SECTION 5
EXPLODED VIEWS

NOTE :

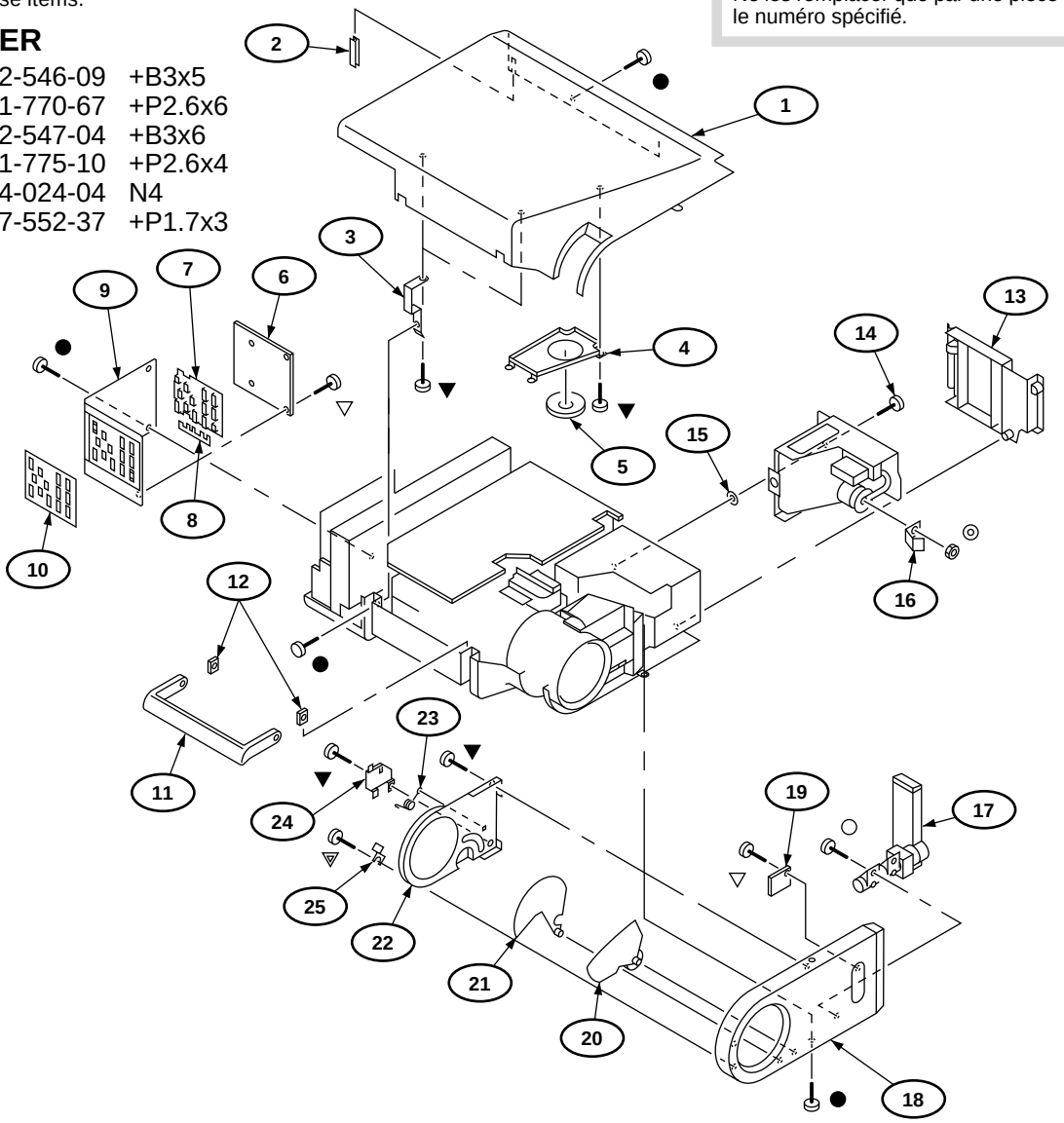
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

5-1. COVER

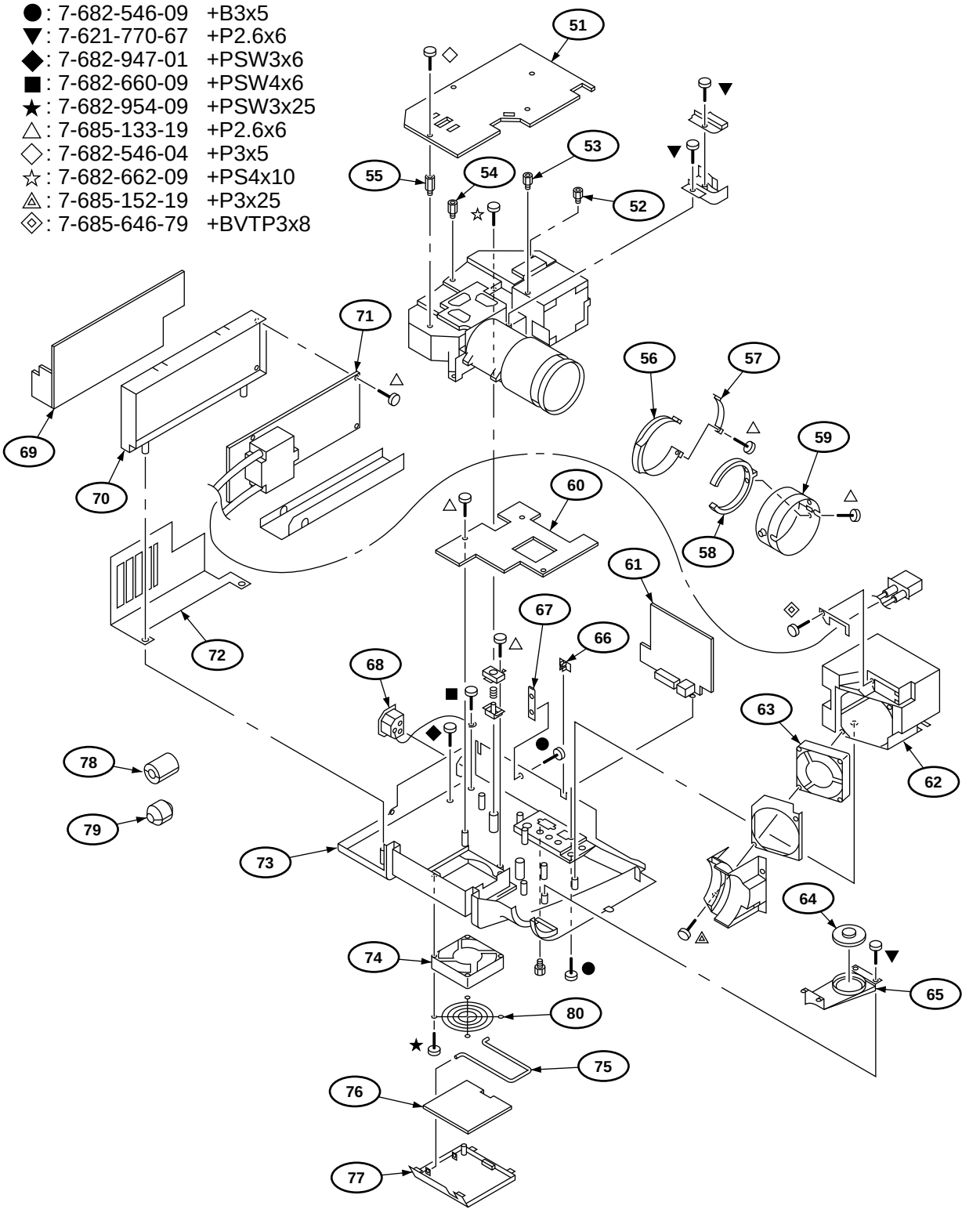
● : 7-682-546-09 +B3x5
▼ : 7-621-770-67 +P2.6x6
○ : 7-682-547-04 +B3x6
▽ : 7-621-775-10 +P2.6x4
◎ : 7-684-024-04 N4
▽ : 7-627-552-37 +P1.7x3



REF NO.		PART NO.	DESCRIPTION	REMARK
1		4-066-230-01	COVER (R)	
2		4-066-205-01	FOOT (RE)	
3	*	4-066-192-02	BRACKET (TP)	
4		4-066-214-01	HOLDER (R), SPEAKER	
5		1-504-688-11	SPEAKER (3.6cm)	
6	*	A-1375-175-A	H COMPL	102-137
7		4-066-224-01	BUTTON	
8	*	4-066-216-01	GUIDE, LED	
9		X-4035-952-1	PANEL ASSY, CONTROL	
10		4-066-220-01	SHEET, CONTROL	
11		4-066-219-01	HANDLE	
12		4-066-194-01	BUSH (H)	
13		X-4035-953-1	DOOR ASSY, LAMP	
14		4-396-203-01	SCREW (+B M3X12), PREVENTION	
15	*	3-715-526-01	WASHER (M3)	
16	*	4-065-573-01	GUARD (LMP), LIGHTING	
17		4-066-556-01	ADJUSTOR	
18		X-4035-950-1	PANEL ASSY, FRONT	
19	*	1-715-604-11	PWB, C/H/NF COMBINED	
20		X-4035-951-1	SHUTTER (A) ASSY	
21		4-066-217-01	SHUTTER (B)	
22		4-066-229-01	GUIDE, SHUTTER	
23		4-066-200-01	SPRING (S)	
24		4-066-197-01	PLATE (SP)	
25		4-067-041-01	STOPPER	

5-2. CHASSIS

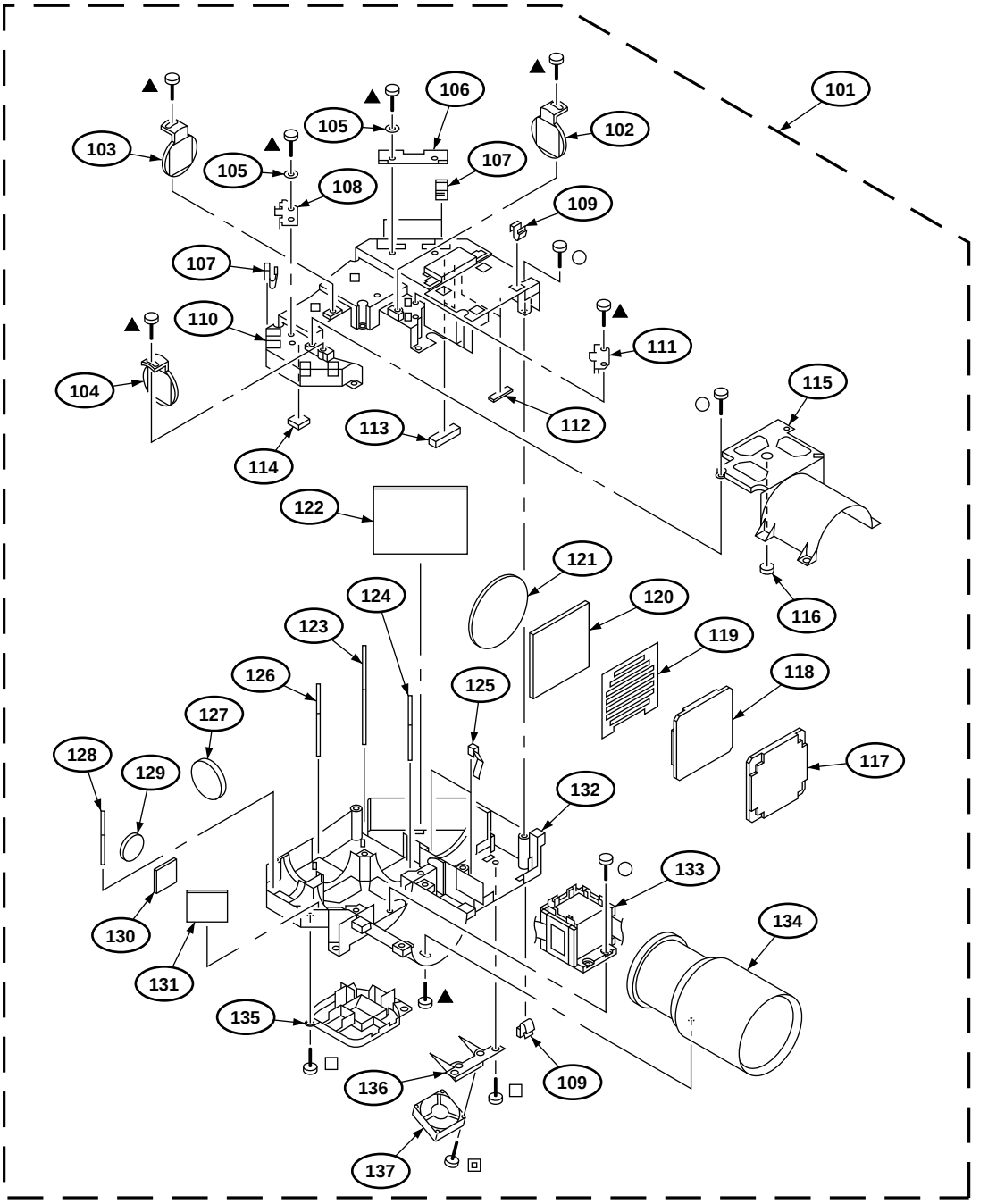
● : 7-682-546-09 +B3x5
▼ : 7-621-770-67 +P2.6x6
◆ : 7-682-947-01 +PSW3x6
■ : 7-682-660-09 +PSW4x6
★ : 7-682-954-09 +PSW3x25
△ : 7-685-133-19 +P2.6x6
◇ : 7-682-546-04 +P3x5
☆ : 7-682-662-09 +PS4x10
⟁ : 7-685-152-19 +P3x25
◈ : 7-685-646-79 +BVTP3x8



REF NO.		PART NO.	DESCRIPTION	REMARK
51	*	A-1335-102-A	C COMPL	
52		4-066-549-01	SPACER	
53		4-066-549-11	SPACER	
54		4-066-549-21	SPACER	
55		4-066-549-31	SPACER	
56		4-066-221-01	RING (A), ZOOM	
57		4-066-190-01	RING (B), ZOOM	
58		4-066-196-01	SPACER, FOCUS	
59		4-066-223-01	RING, FOCUS	
60	*	A-1275-157-A	QA COMPL	
61	*	A-1275-158-A	QB COMPL	
62	*	4-066-228-01	HOUSE, LAMP	
63		1-763-173-11	FAN, DC	
64		1-504-688-11	SPEAKER (3.6CM)	
65		4-066-215-01	HOLDER (L), SPEAKER	
66		4-066-209-01	COVER, TERMINAL	
67	*	4-066-193-01	BRACKET (BT)	
68	⚠	1-526-954-11	INLET, AC	
69	*	A-1316-382-A	G COMPL	
70		4-066-222-01	BRACKET (PW)	
71		A-1501-364-A	SUPPLY ASSY, POWER	
72		4-066-210-01	COVER (PW)	
73		4-066-231-01	COVER (L)	
74		1-763-172-11	FAN, DC	
75		4-066-203-01	SPRING (F)	
76		4-066-191-02	FILTER	
77		X-4035-949-1	COVER ASSY, FILTER	
78		1-500-082-11	CLAMP, SLEEVE FERRITE	
79		1-500-249-11	BEAD, FERRITE (CASE)	
80		4-067-472-01	GUARD, FINGER	

5-3. OPTICS

▲: 7-682-948-01 +PSW3x8
○: 7-682-547-04 +B3x6
□: 7-685-146-11 +P3x8
⧈: 7-685-196-21 +P3x18



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REF NO.		PART NO.	DESCRIPTION	REMARK
101		A-1484-000-A	OPTICS BLOCK ASSY	102-137
102		4-066-181-01	LENS (OPT), B CH CONDENSER	
103		4-066-182-01	LENS (OPT), G CH CONDENSER	
104		4-066-183-01	LENS (OPT), R CH CONDENSER	
105		4-066-174-01	STOPPER (OPT), ROTATION	
106		4-066-237-01	ADJUSTTER, MIRROR (OPT)	
107		4-066-173-01	FASTENER (OPT), ADJUST MIRROR	
108		4-066-242-01	ADJUSTER, R MIRROR (OPT)	
109		4-066-172-01	FASTENER (OPT), MIRROR	
110	*	4-066-185-01	COVER (OPT), UNIT	
111		4-066-243-01	ADJUSTER, B MIRROR (OPT)	
112	*	4-066-239-01	HOLDER (OPT), FLY EYE	
113		4-067-127-01	STOPPER, P/S (OPT)	
114	*	4-066-238-01	STOPPER (OPT), LENS	
115	*	4-066-187-01	COVER (OPT), LENS	
116		4-066-171-01	STOPPER, 4P PRISM (OPT)	
117		4-066-177-01	FLY EYE LENS-1 (OPT)	
118	*	4-066-178-01	FLY EYE LENS-2 (OPT)	
119	*	4-066-234-01	SLIT, P/S (OPT)	
120	*	4-066-175-01	CONVERTER, P/S (OPT)	
121	*	4-066-161-01	LENS (OPT), MAIN CONDENSER	
122	*	4-066-162-01	MIRROR (OPT), WIDE BAND	
123	*	4-066-163-01	MIRROR(OPT),B REFLECT DICHROIC	
124	*	4-066-164-01	MIRROR (OPT), B CHANNEL	
125		4-066-235-01	SPRING (OPT), FLY EYE	
126	*	4-066-165-01	MIRROR(OPT),G REFLECT DICHROIC	
127	*	4-066-166-01	LENS (OPT), RELAY-1	
128	*	4-066-167-01	MIRROR (OPT), R CHANNEL-1	
129	*	4-066-169-01	LENS (OPT), RELAY-2	
130	*	4-066-168-01	TRIMMER (OPT), R CHANNEL	
131	*	4-066-170-01	MIRROR (OPT), R CHANNEL-2	
132	*	4-066-186-01	HOUSING (OPT), UNIT	
133		A-1484-001-A	PRISM BLOCK ASSY	
134		4-066-180-01	LENS (OPT), PROJECTION	
135	*	4-066-184-01	FIN (A)	
136	*	4-066-241-01	BRACKET (OPT), P/S FAN	
137		1-763-101-21	FAN, DC	

SECTION 6
ELECTRICAL PARTS LIST

C

NOTE :

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- PF : μμF

When indicating parts by reference number, please include the board name.

REF NO.	PART NO.	DESCRIPTION			REMARK
	* A-1335-102-A	C COMPLETE PWB			
		**********			
		<CAPACITOR>			
C3001	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C3002	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C3003	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3004	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3005	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3006	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C3007	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3008	1-162-966-11	CERAMIC CHIP	0.0022MF	10%	50V
C3009	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3010	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3011	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3012	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3013	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3014	1-124-779-00	ELECT CHIP	10MF	20%	16V
C3017	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C3021	1-126-393-11	ELECT CHIP	33MF	20%	10V
C3022	1-126-393-11	ELECT CHIP	33MF	20%	10V
C3025	1-126-393-11	ELECT CHIP	33MF	20%	10V
C3026	1-126-393-11	ELECT CHIP	33MF	20%	10V
C3027	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C3028	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3030	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3033	1-126-393-11	ELECT CHIP	33MF	20%	10V
C3034	1-126-393-11	ELECT CHIP	33MF	20%	10V
C3035	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3036	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3037	1-162-966-11	CERAMIC CHIP	0.0022MF	10%	50V
C3038	1-162-966-11	CERAMIC CHIP	0.0022MF	10%	50V
C3039	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3040	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3041	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3042	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C3201	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3202	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3203	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3204	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3205	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3206	1-124-779-00	ELECT CHIP	10MF	20%	16V
C3207	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3208	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3209	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3210	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3211	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3212	1-164-227-11	CERAMIC CHIP	0.022MF	10%	25V
C3213	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3214	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C3215	1-162-913-11	CERAMIC CHIP	8PF	0.5PF	50V
C3216	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3217	1-124-779-00	ELECT CHIP	10MF	20%	16V
C3220	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3221	1-124-779-00	ELECT CHIP	10MF	20%	16V
C3222	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3503	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3506	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3507	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C3510	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3511	1-124-779-00	ELECT CHIP	10MF	20%	16V
C3512	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5001	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C5002	1-117-681-11	ELECT CHIP	100MF	20%	16V
C5003	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5004	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5005	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5006	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C5008	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5009	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5010	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5011	1-117-681-11	ELECT CHIP	100MF	20%	16V
C5012	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5013	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5014	1-126-193-11	ELECT CHIP	1MF	20%	50V
C5015	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5016	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5017	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5018	1-110-666-11	ELECT CHIP	22MF	20%	6.3V
C5019	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5020	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C5021	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5022	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5023	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5024	1-110-666-11	ELECT CHIP	22MF	20%	6.3V

C

REF NO.	PART NO.	DESCRIPTION			REMARK
C5026	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5027	1-110-666-11	ELECT CHIP	22MF	20%	6.3V
C5029	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5030	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5031	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5032	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5034	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C5035	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5037	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5040	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5041	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5042	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5043	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5044	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5045	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5046	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5047	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5048	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5050	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5201	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5202	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5204	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C5205	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5206	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5207	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5208	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5209	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5210	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5211	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5212	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5213	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5214	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5215	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5216	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5217	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5218	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5219	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5220	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5221	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5222	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5223	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5224	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5225	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5226	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5227	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5228	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5229	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5230	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5231	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5232	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5233	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5234	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5235	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5236	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5237	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5238	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5239	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C5240	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5243	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V

REF NO.	PART NO.	DESCRIPTION			REMARK
C5244	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5245	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C5246	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5247	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5248	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5249	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5250	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5251	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5252	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C5253	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5254	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5257	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5258	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5259	1-115-156-11	CERAMIC CHIP	1MF		10V
C5260	1-115-156-11	CERAMIC CHIP	1MF		10V
C5264	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5265	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5266	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5268	1-162-966-11	CERAMIC CHIP	0.0022MF	10%	50V
C5269	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5270	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5301	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5302	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5303	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5304	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5306	1-117-681-11	ELECT CHIP	100MF	20%	16V
C5307	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5308	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5309	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5310	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5401	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5402	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5404	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5405	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5407	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5408	1-117-681-11	ELECT CHIP	100MF	20%	16V
C5409	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5410	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5411	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5415	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5416	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5418	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5419	1-117-681-11	ELECT CHIP	100MF	20%	16V
C5420	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5501	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5502	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C5503	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5504	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C5505	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5506	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5507	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C5508	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C5511	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5512	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C5513	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5514	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5515	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C5516	1-165-176-11	CERAMIC CHIP	0.047MF	10%	16V
C5517	1-164-156-11	CERAMIC CHIP	0.1MF		25V

REF NO.	PART NO.	DESCRIPTION			REMARK
C5519	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5522	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5523	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5525	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5602	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5603	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5604	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5605	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5607	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5608	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5609	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5610	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5611	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C5612	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C5613	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5614	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5615	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5616	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5617	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5618	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5619	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5620	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5621	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C5623	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C5624	1-164-156-11	CERAMIC CHIP	0.1MF		25V
		<CONNECTOR>			
CN5001	* 1-785-306-21	CONNECTOR, BOARD TO BOARD 70P			
CN5002	* 1-580-756-21	PIN, CONNECTOR 7P			
CN5003	1-764-643-21	PIN, CONNECTOR (SMD) 11P			
CN5004	1-691-591-11	PIN, CONNECTOR (1.5MM)(SMD) 8P			
CN5005	1-573-768-21	PIN, CONNECTOR (1.5MM)(SMD) 5P			
CN5006	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P			
CN5008	* 1-580-056-21	PIN, CONNECTOR 3P			
CN5009	1-580-055-21	PIN, CONNECTOR 2P			
CN5010	1-764-007-11	PIN, CONNECTOR (SMD) 12P			
CN5011	* 1-785-306-21	CONNECTOR, BOARD TO BOARD 70P			
CN5301	* 1-784-191-11	CONNECTOR, FFC/FPC (ZIF) 24P			
CN5401	* 1-784-191-11	CONNECTOR, FFC/FPC (ZIF) 24P			
CN5402	* 1-784-191-11	CONNECTOR, FFC/FPC (ZIF) 24P			
		<DIODE>			
D5003	8-719-037-24	DIODE RD12SB3-T1			
D5004	8-719-037-24	DIODE RD12SB3-T1			
D5005	8-719-159-10	DIODE RD5.1SB-T2			
D5006	8-719-159-10	DIODE RD5.1SB-T2			
D5007	8-719-033-53	DIODE RD6.8SB2-T1			
D5008	8-719-988-62	DIODE 1SS355			
D5009	8-719-914-43	DIODE DAN202K			
D5601	8-719-914-44	DIODE DAP202K			
D5602	8-719-045-55	DIODE SEC1201C			
D5603	8-719-045-55	DIODE SEC1201C			
		<FERRITE BEAD>			
FB3002	1-414-227-11	INDUCTOR CHIP	0UH		
FB3202	1-414-227-11	INDUCTOR CHIP	0UH		
FB3203	1-414-227-11	INDUCTOR CHIP	0UH		
FB3502	1-414-227-11	INDUCTOR CHIP	0UH		
FB5001	1-414-229-11	INDUCTOR CHIP	0UH		
FB5002	1-414-229-11	INDUCTOR CHIP	0UH		
FB5003	1-414-227-11	INDUCTOR CHIP	0UH		
FB5201	1-414-227-11	INDUCTOR CHIP	0UH		
FB5202	1-414-227-11	INDUCTOR CHIP	0UH		
FB5203	1-414-227-11	INDUCTOR CHIP	0UH		
FB5301	1-414-227-11	INDUCTOR CHIP	0UH		
FB5401	1-414-227-11	INDUCTOR CHIP	0UH		
FB5422	1-414-227-11	INDUCTOR CHIP	0UH		
FB5501	1-414-227-11	INDUCTOR CHIP	0UH		
FB5502	1-414-227-11	INDUCTOR CHIP	0UH		
FB5601	1-414-227-11	INDUCTOR CHIP	0UH		
		<FILTER>			
FL5001	1-239-466-21	FILTER, EMI			
FL5002	1-239-466-21	FILTER, EMI			
FL5003	1-239-466-21	FILTER, EMI			
FL5004	1-239-466-21	FILTER, EMI			
		<IC>			
IC3001	8-759-447-90	IC TLC5733AIPM			
IC3002	8-759-492-19	IC MM1231XFBE			
IC3201	8-752-351-97	IC CXK1206ATM			
IC3202	8-752-351-97	IC CXK1206ATM			
IC3203	8-752-351-97	IC CXK1206ATM			
IC3204	8-752-351-97	IC CXK1206ATM			
IC3205	8-759-082-57	IC TC7W04FU			
IC3206	8-759-491-46	IC TC74VHCT04AFT(EL)			
IC3207	8-759-491-46	IC TC74VHCT04AFT(EL)			
IC3208	8-759-295-09	IC TLC2932IPW			
IC3209	8-752-386-46	IC CXD2448Q			
IC3210	8-759-058-64	IC TC7S32FU(TE85R)			
IC3501	8-752-338-46	IC CXD1178Q			
IC5001	8-759-157-17	IC PQ05SZ1U			
IC5002	8-759-259-77	IC PQ20VZ5U			
IC5003	8-759-157-17	IC PQ05SZ1U			
IC5004	8-759-351-63	IC TA7812F(TE16L)			
IC5005	8-759-335-28	IC TA78M09F(TE16L)			
IC5006	8-759-360-07	IC BA7657F-E2			
IC5007	8-752-070-54	IC CXA1839Q-T6			
IC5008	8-759-277-63	IC TC7W14FU(TE12R)			
IC5009	8-759-286-47	IC PC74HC4053D-T			
IC5010	8-759-082-58	IC TC7W08FU			
IC5011	8-759-058-62	IC TC7S08FU(TE85R)			
IC5201	8-752-088-08	IC CXA2111R-T6			
IC5202	8-759-490-57	IC M52337SP			
IC5204	8-759-286-99	IC PC74HC74D-T			
IC5205	8-759-286-99	IC PC74HC74D-T			
IC5206	8-759-546-07	IC MB90096PF-G-147-BND-ER			
IC5207	8-759-064-36	IC MB88346BPFV			
IC5208	8-759-082-55	IC TC7W00FU			
IC5209	8-759-082-58	IC TC7W08FU			
IC5210	8-759-079-52	IC TC74VHC08FS(EL)			
IC5301	8-752-085-11	IC CXA2112R-T6			
IC5401	8-752-085-11	IC CXA2112R-T6			
IC5402	8-752-085-11	IC CXA2112R-T6			
IC5502	8-752-395-31	IC CXD2464R-T6			
IC5503	8-759-482-35	IC MC100ELT20DR2			
IC5504	8-759-295-09	IC TLC2932IPW			
IC5505	8-759-058-58	IC TC7S04FU(TE85R)			

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REF NO.	PART NO.	DESCRIPTION				REMARK
IC5602	8-759-082-58	IC	TC7W08FU			
IC5604	8-759-162-80	IC	MM1170BFB			
IC5605	8-759-082-58	IC	TC7W08FU			
IC5606	8-759-285-52	IC	PC74HC02D-T			
IC5607	8-759-439-67	IC	TC7W126FU(TE12R)			
IC5608	8-759-239-92	IC	TC74HC07AF			
IC5609	8-759-480-10	IC	HD64F3048F16			
IC5610	8-759-471-25	IC	BR24CF16F			
IC5611	8-759-471-25	IC	BR24CF16F			
		<COIL>				
L3001	1-408-599-31	INDUCTOR	4.7UH			
L3201	1-410-393-11	INDUCTOR CHIP	100UH			
L3501	1-410-393-11	INDUCTOR	100UH			
L5201	1-410-377-31	INDUCTOR CHIP	4.7UH			
L5202	1-410-377-31	INDUCTOR CHIP	4.7UH			
L5301	1-410-377-31	INDUCTOR CHIP	4.7UH			
L5302	1-410-377-31	INDUCTOR CHIP	4.7UH			
L5501	1-410-377-31	INDUCTOR CHIP	4.7UH			
L5502	1-410-393-11	INDUCTOR CHIP	100UH			
		<FILTER>				
LF3201	1-239-466-21	FILTER, EMI				
		<TRANSISTOR>				
Q3001	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q3002	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q3006	8-729-117-32	TRANSISTOR	2SC4177-L6			
Q3010	8-729-117-32	TRANSISTOR	2SC4177-L6			
Q3014	8-729-117-32	TRANSISTOR	2SC4177-L6			
Q3502	8-729-140-63	TRANSISTOR	2SA1611-M5M6			
Q3504	8-729-140-63	TRANSISTOR	2SA1611-M5M6			
Q3506	8-729-140-63	TRANSISTOR	2SA1611-M5M6			
Q5001	8-729-907-00	TRANSISTOR	DTC114EU			
Q5002	8-729-117-32	TRANSISTOR	2SC4177-L6			
Q5003	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q5201	8-729-117-32	TRANSISTOR	2SC4177-L6			
Q5301	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q5302	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q5401	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q5402	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q5403	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q5404	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R			
Q5501	8-729-028-91	TRANSISTOR	DTA144EUA-T106			
Q5603	8-729-101-07	TRANSISTOR	2SB798-DL			
Q5604	8-729-117-32	TRANSISTOR	2SC4177-L6			
		<RESISTOR>				
R3001	1-216-814-11	RES,CHIP	270	5%	1/16W	
R3002	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W	
R3003	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W	
R3004	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W	
R3005	1-216-814-11	RES,CHIP	270	5%	1/16W	
R3006	1-218-721-11	METAL CHIP	16K	0.50%	1/16W	
R3010	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3011	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3012	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3013	1-216-809-11	RES,CHIP	100	5%	1/16W	

REF NO.	PART NO.	DESCRIPTION				REMARK
R3025	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3038	1-218-721-11	METAL CHIP	16K	0.50%	1/16W	
R3039	1-218-721-11	METAL CHIP	16K	0.50%	1/16W	
R3040	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3041	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3044	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3056	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3201	1-216-833-11	RES,CHIP	10K	5%	1/16W	
R3202	1-216-797-11	RES,CHIP	10	5%	1/16W	
R3203	1-216-857-11	RES,CHIP	1M	5%	1/16W	
R3204	1-216-797-11	RES,CHIP	10	5%	1/16W	
R3205	1-216-817-11	RES,CHIP	470	5%	1/16W	
R3206	1-216-813-11	RES,CHIP	220	5%	1/16W	
R3207	1-216-827-11	RES,CHIP	3.3K	5%	1/16W	
R3208	1-216-822-11	RES,CHIP	1.2K	5%	1/16W	
R3209	1-216-864-11	SHORT	0			
R3210	1-216-797-11	RES,CHIP	10	5%	1/16W	
R3211	1-216-833-11	RES,CHIP	10K	5%	1/16W	
R3212	1-216-833-11	RES,CHIP	10K	5%	1/16W	
R3213	1-216-864-11	SHORT	0			
R3214	1-216-797-11	RES,CHIP	10	5%	1/16W	
R3215	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3216	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3217	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3218	1-216-797-11	RES,CHIP	10	5%	1/16W	
R3219	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3220	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3221	1-216-797-11	RES,CHIP	10	5%	1/16W	
R3222	1-216-833-11	RES,CHIP	10K	5%	1/16W	
R3223	1-216-864-11	SHORT	0			
R3224	1-216-801-11	RES,CHIP	22	5%	1/16W	
R3226	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3227	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3228	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3229	1-216-833-11	RES,CHIP	10K	5%	1/16W	
R3230	1-216-829-11	RES,CHIP	4.7K	5%	1/16W	
R3231	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3232	1-216-809-11	RES,CHIP	100	5%	1/16W	
R3501	1-216-835-11	RES,CHIP	15K	5%	1/16W	
R3502	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3503	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3504	1-216-833-11	RES,CHIP	10K	5%	1/16W	
R3505	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3506	1-216-813-11	RES,CHIP	220	5%	1/16W	
R3507	1-216-827-11	RES,CHIP	3.3K	5%	1/16W	
R3508	1-216-823-11	RES,CHIP	1.5K	5%	1/16W	
R3509	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R3510	1-216-817-11	RES,CHIP	470	5%	1/16W	
R3512	1-216-813-11	RES,CHIP	220	5%	1/16W	
R3517	1-216-813-11	RES,CHIP	220	5%	1/16W	
R5003	1-216-809-11	RES,CHIP	100	5%	1/16W	
R5004	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R5005	1-216-821-11	RES,CHIP	1K	5%	1/16W	
R5006	1-216-815-11	RES,CHIP	330	5%	1/16W	
R5007	1-216-815-11	RES,CHIP	330	5%	1/16W	
R5008	1-216-815-11	RES,CHIP	330	5%	1/16W	
R5009	1-216-815-11	RES,CHIP	330	5%	1/16W	
R5010	1-216-815-11	RES,CHIP	330	5%	1/16W	
R5011	1-216-833-11	RES,CHIP	10K	5%	1/16W	

REF NO.	PART NO.	DESCRIPTION			REMARK
R5012	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5013	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5014	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5015	1-216-809-11	RES,CHIP	100	5%	1/16W
R5016	1-216-809-11	RES,CHIP	100	5%	1/16W
R5017	1-216-809-11	RES,CHIP	100	5%	1/16W
R5018	1-216-809-11	RES,CHIP	100	5%	1/16W
R5019	1-216-809-11	RES,CHIP	100	5%	1/16W
R5020	1-216-809-11	RES,CHIP	100	5%	1/16W
R5021	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5022	1-218-723-11	METAL CHIP	20K	0.50%	1/16W
R5023	1-218-714-11	METAL CHIP	8.2K	0.50%	1/16W
R5024	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5025	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R5026	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5027	1-216-809-11	RES,CHIP	100	5%	1/16W
R5028	1-216-809-11	RES,CHIP	100	5%	1/16W
R5029	1-216-809-11	RES,CHIP	100	5%	1/16W
R5030	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5031	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5032	1-216-853-11	RES,CHIP	470K	5%	1/16W
R5033	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5034	1-216-805-11	RES,CHIP	47	5%	1/16W
R5035	1-216-805-11	RES,CHIP	47	5%	1/16W
R5036	1-216-809-11	RES,CHIP	100	5%	1/16W
R5037	1-216-805-11	RES,CHIP	47	5%	1/16W
R5038	1-216-823-11	RES,CHIP	1.5K	5%	1/16W
R5039	1-216-817-11	RES,CHIP	470	5%	1/16W
R5040	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5041	1-216-809-11	RES,CHIP	100	5%	1/16W
R5042	1-216-805-11	RES,CHIP	47	5%	1/16W
R5043	1-216-805-11	RES,CHIP	47	5%	1/16W
R5044	1-216-843-11	RES,CHIP	68K	5%	1/16W
R5045	1-216-805-11	RES,CHIP	47	5%	1/16W
R5046	1-216-809-11	RES,CHIP	100	5%	1/16W
R5047	1-216-801-11	RES,CHIP	22	5%	1/16W
R5048	1-216-809-11	RES,CHIP	100	5%	1/16W
R5049	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5050	1-216-809-11	RES,CHIP	100	5%	1/16W
R5051	1-216-838-11	RES,CHIP	27K	5%	1/16W
R5052	1-216-809-11	RES,CHIP	100	5%	1/16W
R5053	1-216-809-11	RES,CHIP	100	5%	1/16W
R5054	1-216-809-11	RES,CHIP	100	5%	1/16W
R5055	1-216-809-11	RES,CHIP	100	5%	1/16W
R5056	1-216-801-11	RES,CHIP	22	5%	1/16W
R5057	1-216-801-11	RES,CHIP	22	5%	1/16W
R5058	1-216-809-11	RES,CHIP	100	5%	1/16W
R5059	1-216-809-11	RES,CHIP	100	5%	1/16W
R5060	1-216-809-11	RES,CHIP	100	5%	1/16W
R5061	1-216-809-11	RES,CHIP	100	5%	1/16W
R5062	1-216-824-11	RES,CHIP	1.8K	5%	1/16W
R5063	1-216-827-11	RES,CHIP	3.3K	5%	1/16W
R5201	1-218-702-11	METAL CHIP	2.7K	0.50%	1/16W
R5202	1-218-705-11	METAL CHIP	3.6K	0.50%	1/16W
R5203	1-216-864-11	SHORT	0		
R5204	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5205	1-216-801-11	RES,CHIP	22	5%	1/16W
R5206	1-216-809-11	RES,CHIP	100	5%	1/16W
R5207	1-216-809-11	RES,CHIP	100	5%	1/16W
R5208	1-216-801-11	RES,CHIP	22	5%	1/16W
R5209	1-216-801-11	RES,CHIP	22	5%	1/16W
R5210	1-216-819-11	RES,CHIP	680	5%	1/16W
R5211	1-216-809-11	RES,CHIP	100	5%	1/16W
R5213	1-216-801-11	RES,CHIP	22	5%	1/16W
R5215	1-216-809-11	RES,CHIP	100	5%	1/16W
R5216	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5217	1-216-801-11	RES,CHIP	22	5%	1/16W
R5218	1-216-819-11	RES,CHIP	680	5%	1/16W
R5219	1-216-809-11	RES,CHIP	100	5%	1/16W
R5221	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5224	1-216-809-11	RES,CHIP	100	5%	1/16W
R5225	1-216-801-11	RES,CHIP	22	5%	1/16W
R5226	1-216-819-11	RES,CHIP	680	5%	1/16W
R5227	1-216-809-11	RES,CHIP	100	5%	1/16W
R5232	1-216-809-11	RES,CHIP	100	5%	1/16W
R5233	1-216-809-11	RES,CHIP	100	5%	1/16W
R5235	1-216-805-11	RES,CHIP	47	5%	1/16W
R5236	1-218-723-11	METAL CHIP	20K	0.50%	1/16W
R5237	1-216-842-11	RES,CHIP	56K	5%	1/16W
R5238	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5239	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5240	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5241	1-216-828-11	RES,CHIP	3.9K	5%	1/16W
R5242	1-216-828-11	RES,CHIP	3.9K	5%	1/16W
R5243	1-216-828-11	RES,CHIP	3.9K	5%	1/16W
R5245	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5246	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5247	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5248	1-216-822-11	RES,CHIP	1.2K	5%	1/16W
R5249	1-216-822-11	RES,CHIP	1.2K	5%	1/16W
R5250	1-216-822-11	RES,CHIP	1.2K	5%	1/16W
R5251	1-216-809-11	RES,CHIP	100	5%	1/16W
R5252	1-216-809-11	RES,CHIP	100	5%	1/16W
R5253	1-216-809-11	RES,CHIP	100	5%	1/16W
R5255	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5257	1-216-864-11	SHORT	0		
R5260	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5261	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5262	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5263	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5267	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R5268	1-218-706-11	METAL CHIP	3.9K	0.50%	1/16W
R5269	1-218-706-11	METAL CHIP	3.9K	0.50%	1/16W
R5270	1-216-809-11	RES,CHIP	100	5%	1/16W
R5271	1-218-706-11	METAL CHIP	3.9K	0.50%	1/16W
R5272	1-216-809-11	RES,CHIP	100	5%	1/16W
R5273	1-216-809-11	RES,CHIP	100	5%	1/16W
R5274	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5275	1-216-822-11	RES,CHIP	1.2K	5%	1/16W
R5301	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5302	1-218-721-11	METAL CHIP	16K	0.50%	1/16W
R5303	1-216-809-11	RES,CHIP	100	5%	1/16W
R5305	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R5306	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5307	1-216-864-11	SHORT	0		
R5308	1-216-789-11	RES,CHIP	2.2	5%	1/16W

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REF NO.	PART NO.	DESCRIPTION			REMARK
R5309	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5310	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5311	1-216-809-11	RES,CHIP	100	5%	1/16W
R5312	1-216-805-11	RES,CHIP	47	5%	1/16W
R5313	1-216-805-11	RES,CHIP	47	5%	1/16W
R5314	1-216-805-11	RES,CHIP	47	5%	1/16W
R5315	1-216-805-11	RES,CHIP	47	5%	1/16W
R5316	1-216-805-11	RES,CHIP	47	5%	1/16W
R5317	1-216-805-11	RES,CHIP	47	5%	1/16W
R5318	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5319	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5320	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R5401	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5402	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5403	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5404	1-216-809-11	RES,CHIP	100	5%	1/16W
R5405	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5406	1-216-805-11	RES,CHIP	47	5%	1/16W
R5407	1-216-805-11	RES,CHIP	47	5%	1/16W
R5408	1-216-805-11	RES,CHIP	47	5%	1/16W
R5409	1-216-805-11	RES,CHIP	47	5%	1/16W
R5410	1-216-805-11	RES,CHIP	47	5%	1/16W
R5411	1-216-805-11	RES,CHIP	47	5%	1/16W
R5412	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5413	1-216-809-11	RES,CHIP	100	5%	1/16W
R5414	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5415	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5416	1-216-864-11	SHORT	0		
R5421	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5422	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5423	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5424	1-216-809-11	RES,CHIP	100	5%	1/16W
R5425	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5426	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5427	1-216-805-11	RES,CHIP	47	5%	1/16W
R5428	1-216-805-11	RES,CHIP	47	5%	1/16W
R5429	1-216-805-11	RES,CHIP	47	5%	1/16W
R5430	1-216-805-11	RES,CHIP	47	5%	1/16W
R5431	1-216-805-11	RES,CHIP	47	5%	1/16W
R5432	1-216-805-11	RES,CHIP	47	5%	1/16W
R5433	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5434	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5435	1-216-809-11	RES,CHIP	100	5%	1/16W
R5436	1-216-864-11	SHORT	0		
R5437	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R5438	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R5501	1-216-809-11	RES,CHIP	100	5%	1/16W
R5502	1-216-809-11	RES,CHIP	100	5%	1/16W
R5503	1-216-797-11	RES,CHIP	10	5%	1/16W
R5504	1-216-809-11	RES,CHIP	100	5%	1/16W
R5505	1-216-805-11	RES,CHIP	47	5%	1/16W
R5506	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5507	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5508	1-216-817-11	RES,CHIP	470	5%	1/16W
R5509	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R5510	1-216-815-11	RES,CHIP	330	5%	1/16W
R5511	1-216-815-11	RES,CHIP	330	5%	1/16W
R5512	1-218-702-11	METAL CHIP	2.7K	0.50%	1/16W
R5513	1-216-809-11	RES,CHIP	100	5%	1/16W

REF NO.	PART NO.	DESCRIPTION			REMARK
R5514	1-216-809-11	RES,CHIP	100	5%	1/16W
R5515	1-216-809-11	RES,CHIP	100	5%	1/16W
R5516	1-216-864-11	SHORT	0		
R5602	1-216-809-11	RES,CHIP	100	5%	1/16W
R5603	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5604	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R5605	1-216-818-11	RES,CHIP	560	5%	1/16W
R5606	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R5607	1-216-818-11	RES,CHIP	560	5%	1/16W
R5608	1-216-809-11	RES,CHIP	100	5%	1/16W
R5611	1-216-809-11	RES,CHIP	100	5%	1/16W
R5612	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5613	1-216-809-11	RES,CHIP	100	5%	1/16W
R5615	1-216-809-11	RES,CHIP	100	5%	1/16W
R5616	1-216-809-11	RES,CHIP	100	5%	1/16W
R5617	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5618	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5619	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5620	1-216-809-11	RES,CHIP	100	5%	1/16W
R5621	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5622	1-216-809-11	RES,CHIP	100	5%	1/16W
R5623	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5624	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5625	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5626	1-216-809-11	RES,CHIP	100	5%	1/16W
R5627	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5628	1-216-809-11	RES,CHIP	100	5%	1/16W
R5629	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5630	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5631	1-216-809-11	RES,CHIP	100	5%	1/16W
R5632	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5633	1-216-809-11	RES,CHIP	100	5%	1/16W
R5635	1-216-809-11	RES,CHIP	100	5%	1/16W
R5636	1-216-809-11	RES,CHIP	100	5%	1/16W
R5637	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5638	1-216-809-11	RES,CHIP	100	5%	1/16W
R5639	1-216-809-11	RES,CHIP	100	5%	1/16W
R5640	1-216-809-11	RES,CHIP	100	5%	1/16W
R5641	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5642	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5643	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5644	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5645	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5646	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5647	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5650	1-216-809-11	RES,CHIP	100	5%	1/16W
R5651	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5654	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5655	1-216-841-11	RES,CHIP	47K	5%	1/16W
		<RESISTOR NETWORK>			
RB3001	1-236-908-11	RES, CHIP NETWORK 10K (3216)			
RB3002	1-236-908-11	RES, CHIP NETWORK 10K (3216)			
RB3201	1-236-908-11	RES, CHIP NETWORK 10K (3216)			
RB3202	1-236-908-11	RES, CHIP NETWORK 10K (3216)			
RB3203	1-236-908-11	RES, CHIP NETWORK 10K (3216)			
RB3204	1-236-908-11	RES, CHIP NETWORK 10K (3216)			
RB3205	1-236-908-11	RES, CHIP NETWORK 10K (3216)			

REF NO.	PART NO.	DESCRIPTION	REMARK
RB3206	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3207	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3208	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3209	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB5201	1-233-576-11	RES, CHIP NETWORK 100	
RB5202	1-233-576-11	RES, CHIP NETWORK 100	
RB5501	1-233-576-11	RES, CHIP NETWORK 100	
RB5502	1-233-574-11	RES, CHIP NETWORK 10	
RB5503	1-233-576-11	RES, CHIP NETWORK 100	
RB5504	1-233-576-11	RES, CHIP NETWORK 100	
		<THERMISTOR>	
TH5601	1-808-656-11	THERMISTOR	
TH5602	1-808-656-11	THERMISTOR	
		<TEST PIN>	
TP5007	1-535-757-11	CHIP, CHECKER	
TP5008	1-535-757-11	CHIP, CHECKER	
TP5009	1-535-757-11	CHIP, CHECKER	
TP5202	1-535-757-11	CHIP, CHECKER	
TP5205	1-535-757-11	CHIP, CHECKER	
TP5206	1-535-757-11	CHIP, CHECKER	
TP5207	1-535-757-11	CHIP, CHECKER	
		<CRYSTAL>	
X3201	1-760-778-21	VIBRATOR, CRYSTAL	
X5001	1-767-347-11	VIBRATOR, CRYSTAL (16MHz)	
**********			
*	A-1316-382-A	G COMPLETE PWB ********** (Including GA board, GAA board and GB board)	
	1-763-101-31	FAN, DC	
**********			
		GA MOUNTED PWB **********	
	1-533-223-11	HOLDER, FUSE	
	1-543-923-11	FERRITE 0UH	
	1-923-513-77	TUBE DIA7.3 10MM TRP	
*	4-374-846-01	COVER, CAPACITOR, CAP TYPE	
*	4-374-846-11	COVER, CAPACITOR, CAP TYPE	
	7-682-648-09	SCREW +PS 3X8	
	7-682-651-09	SCREW +PS 3X14	
		<CAPACITOR>	
C9001 ⚠	1-113-907-51	CERAMIC 0.0022MF 20% 250V	
C9002 ⚠	1-113-907-51	CERAMIC 0.0022MF 20% 250V	
C9003 ⚠	1-113-513-11	FILM 1MF 20% 275V	
C9004 ⚠	1-113-511-11	FILM 0.47MF 20% 275V	
C9005 ⚠	1-115-166-11	FILM 0.22MF 20% 275V	
C9006 ⚠	1-113-907-51	CERAMIC 0.0022MF 20% 250V	
C9007 ⚠	1-113-907-51	CERAMIC 0.0022MF 20% 250V	
C9008	1-125-991-11	ELECT CHIP 180MF 20% 450V	
C9009	1-137-477-11	FILM 0.47MF 10% 400V	
C9010	1-104-330-91	CERAMIC 470PF 10% 1KV	
C9011	1-104-330-91	CERAMIC 470PF 10% 1KV	
C9012	1-107-792-11	CERAMIC 100PF 5% 1KV	
C9013	1-129-720-00	FILM 0.033MF 5% 630V	
C9014	1-115-785-91	ELECT 470MF 20% 25V	
C9015	1-107-889-11	ELECT 220MF 20% 25V	
C9016	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C9017	1-107-888-11	ELECT 47MF 20% 25V	
C9018	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C9019	1-130-202-00	FILM 0.022MF 5% 400V	
C9020	1-115-742-11	ELECT 0.0027F 20% 10V	
C9021	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C9024	1-107-909-11	ELECT 47MF 20% 16V	
C9025	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C9026	1-107-792-11	CERAMIC 100PF 5% 1KV	
C9027	1-107-792-11	CERAMIC 100PF 5% 1KV	
C9030	1-113-903-11	CERAMIC 0.001MF 20% 250V	
		<CONNECTOR>	
CN9001	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN9002 *	1-774-247-11	CONNECTOR, BOARD TO BOARD 5P	
CN9004 *	1-774-248-11	CONNECTOR, BOARD TO BOARD 8P	
CN9005 *	1-774-247-11	CONNECTOR, BOARD TO BOARD 5P	
CN9006 *	1-774-248-11	CONNECTOR, BOARD TO BOARD 8P	
		<DIODE>	
D9001	8-719-066-76	DIODE TF861S	
D9002 ⚠	8-719-066-75	DIODE D6SB80	
D9003	8-719-060-06	DIODE FSF10A60	
D9004	8-719-055-30	DIODE D1FS4A-TA	
D9005	8-719-055-30	DIODE D1FS4A-TA	
D9006	8-719-055-30	DIODE D1FS4A-TA	
D9007	8-719-055-30	DIODE D1FS4A-TA	
D9008	8-719-059-24	DIODE P6KE200A	
D9009	8-719-961-04	DIODE RGP10J	
D9010	8-719-018-83	DIODE D2S4M	
D9011	8-719-300-33	DIODE RU-3AM	
D9012	8-719-104-34	DIODE 1S2836	
D9013	8-719-106-71	DIODE RD12M-B2	
D9014	8-719-053-50	DIODE FCQ20A06	
D9015	8-719-051-96	DIODE FMG-G2CS	
D9017	8-719-053-50	DIODE FCQ20A06	
D9018	8-719-071-96	DIODE P6KE350A	
D9020	8-719-071-96	DIODE P6KE350A	
D9022	8-719-055-33	DIODE D1FL40	
D9025	8-719-106-71	DIODE RD12M-B2	
D9026	8-719-106-71	DIODE RD12M-B2	
D9031	8-719-071-96	DIODE P6KE350A	
D9032	8-719-071-96	DIODE P6KE350A	
		<FUSE>	
F9001 ⚠	1-576-233-11	FUSE (H.B.C.)(6.3A 250V)	
		<FERRITE BEAD>	
FB9001	1-410-396-61	FERRITE 0UH	
		<IC>	
IC9001	8-759-487-72	IC TOP222Y-BB	
IC9002	8-759-470-64	IC TOP223Y-BB	

GA GAA

REF NO.		PART NO.	DESCRIPTION				REMARK
			<COIL>				
L9001	⚠	1-416-461-11	INDUCTOR	0UH			
L9002	⚠	1-431-838-11	TRANSFORMER, LINE FILTER				
L9003		1-416-754-11	INDUCTOR	800UH			
L9004		1-406-664-21	INDUCTOR	0UH			
			<PHOTO COUPLER>				
PH9001		8-749-010-64	PHOTO COUPLER PC123F2				
PH9002		8-749-010-64	PHOTO COUPLER PC123F2				
			<IC LINK>				
PS9001	⚠	1-533-282-21	LINK, IC (2A)				
PS9004	⚠	1-576-124-21	LINK, IC (1A)				
			<TRANSISTOR>				
Q9001		8-729-043-15	TRANSISTOR 2SK3013F-02				
Q9002		8-729-043-15	TRANSISTOR 2SK3013F-02				
Q9003		8-729-230-49	TRANSISTOR 2SC2712-YG				
			<RESISTOR>				
R9004	⚠	1-202-882-91	SOLID	560K	20%	1/2W	
R9005		1-216-025-91	RES,CHIP	100	5%	1/10W	
R9008		1-216-003-11	RES,CHIP	12	5%	1/10W	
R9009		1-216-077-00	RES,CHIP	15K	5%	1/10W	
R9010		1-216-003-11	RES,CHIP	12	5%	1/10W	
R9011		1-216-077-00	RES,CHIP	15K	5%	1/10W	
R9013		1-217-156-00	REGISTER	0.22	10%	5W	F
R9015		1-249-389-11	CARBON	4.7	5%	1/4W	F
R9016		1-216-009-00	RES,CHIP	22	5%	1/10W	
R9017		1-216-311-00	RES,CHIP	6.8	5%	1/10W	
R9018		1-216-075-00	RES,CHIP	12K	5%	1/10W	
R9019		1-216-025-91	RES,CHIP	100	5%	1/10W	
R9020		1-216-689-11	RES,CHIP	39K	5%	1/10W	
R9023		1-216-311-00	RES,CHIP	6.8	5%	1/10W	
R9025		1-216-049-91	RES,CHIP	1K	5%	1/10W	
R9026		1-249-389-11	CARBON	4.7	5%	1/4W	F
R9027		1-217-786-11	FUSIBLE	22	5%	5W	F
R9028		1-220-294-11	RES,CHIP	1.5K	5%	1/2W	
R9069		1-220-337-11	RES,CHIP	270K	5%	1/2W	
R9070		1-220-337-11	RES,CHIP	270K	5%	1/2W	
R9071		1-216-487-11	METAL OXIDE	12K	5%	3W	F
R9072		1-216-487-11	METAL OXIDE	12K	5%	3W	F
R9073		1-216-487-11	METAL OXIDE	12K	5%	3W	F
R9074		1-215-927-00	METAL OXIDE	47K	5%	3W	F
R9075		1-215-927-00	METAL OXIDE	47K	5%	3W	F
			<TRANSFORMER>				
T9001	⚠	1-431-680-11	TRANSFORMER, CONVERTER (SRT)				
T9002	⚠	1-431-999-11	TRANSFORMER, CONVERTER (SRT)				
			<VARISTOR>				
VD9001	⚠	1-801-073-41	VARISTOR ERZV14D471				
VD9002		1-803-136-11	VARISTOR ZP2600				

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REF NO.	PART NO.	DESCRIPTION				REMARK
		GAA MOUNTED PWB				
		**********				
		<CAPACITOR>				
C8001	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C8012	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C8013	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V	
C8014	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V	
C8015	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C8016	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C8033	1-128-078-11	ELECT	33MF	20%	25V	
C8034	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C8035	1-128-078-11	ELECT	33MF	20%	25V	
C8041	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
		<CONNECTOR>				
CN8004	* 1-774-244-11	CONNECTOR, BOARD TO BOARD 5P				
CN8005	* 1-774-245-11	CONNECTOR, BOARD TO BOARD 8P				
		<IC>				
IC8001	8-759-485-61	IC FA5331P				
		<TRANSISTOR>				
Q8003	8-729-230-49	TRANSISTOR 2SC2712-YG				
		<RESISTOR>				
R8013	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R8014	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R8016	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R8017	1-216-101-00	RES,CHIP	150K	5%	1/10W	
R8018	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R8019	1-216-005-00	RES,CHIP	15	5%	1/10W	
R8022	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R8028	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R8032	1-216-629-11	METAL CHIP	120	0.50%	1/10W	
R8036	1-216-025-91	RES,CHIP	100	5%	1/10W	
R8037	1-216-689-11	RES,CHIP	39K	5%	1/10W	
R8038	1-216-075-00	RES,CHIP	12K	5%	1/10W	
R8039	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R8041	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	
R8051	1-215-481-00	METAL	330K	1%	1/4W	
R8052	1-215-483-00	METAL	390K	1%	1/4W	
R8053	1-215-485-00	METAL	470K	1%	1/4W	
R8054	1-215-483-00	METAL	390K	1%	1/4W	
R8055	1-215-481-00	METAL	330K	1%	1/4W	
R8056	1-215-483-00	METAL	390K	1%	1/4W	
R8057	1-215-481-00	METAL	330K	1%	1/4W	
R8058	1-215-483-00	METAL	390K	1%	1/4W	
R8059	1-215-483-00	METAL	390K	1%	1/4W	
R8060	1-215-491-00	METAL	820K	1%	1/4W	
R8061	1-215-483-00	METAL	390K	1%	1/4W	
R8062	1-215-491-00	METAL	820K	1%	1/4W	

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REF NO.	PART NO.	DESCRIPTION				REMARK
		GB MOUNTED PWB				
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		<CAPACITOR>				
C7001	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7002	1-128-078-11	ELECT	33MF	20%	25V	
C7003	1-115-784-11	ELECT	270MF	20%	25V	
C7004	1-128-078-11	ELECT	33MF	20%	25V	
C7005	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7006	1-124-589-11	ELECT	47MF	20%	16V	
C7007	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C7008	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7009	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7010	1-126-098-11	ELECT	22MF	20%	35V	
C7011	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7012	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C7013	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C7014	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7015	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C7016	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7017	1-126-098-11	ELECT	22MF	20%	35V	
C7018	1-115-784-11	ELECT	270MF	20%	25V	
C7019	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7020	1-126-157-11	ELECT	10MF	20%	16V	
C7021	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7022	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7023	1-128-078-11	ELECT	33MF	20%	25V	
C7024	1-128-078-11	ELECT	33MF	20%	25V	
C7025	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C7026	1-128-078-11	ELECT	33MF	20%	25V	
C7040	1-111-087-11	ELECT	330MF	20%	35V	
C7042	1-115-785-91	ELECT	470MF	20%	25V	
C7052	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V	
C7053	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C7054	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C7055	1-126-155-11	ELECT	100MF	20%	6.3V	
C7061	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V	
C7062	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V	
C7076	1-124-589-11	ELECT	47MF	20%	16V	
		<CONNECTOR>				
CN7008	* 1-564-506-11	PLUG, CONNECTOR 3P				
CN7101	* 1-774-244-11	CONNECTOR, BOARD TO BOARD 5P				
CN7102	* 1-774-245-11	CONNECTOR, BOARD TO BOARD 8P				
CN7103	1-564-510-11	PLUG, CONNECTOR 7P				
CN7104	* 1-564-506-11	PLUG, CONNECTOR 3P				
CN7105	* 1-564-506-11	PLUG, CONNECTOR 3P				
CN7106	* 1-564-507-11	PLUG, CONNECTOR 4P				
CN7107	* 1-564-514-11	PLUG, CONNECTOR 11P				
CN7109	* 1-564-506-11	PLUG, CONNECTOR 3P				
		<DIODE>				
D7001	8-719-914-43	DIODE DAN202K				
D7002	8-719-055-30	DIODE D1FS4A-TA				
D7008	8-719-055-30	DIODE D1FS4A-TA				
D7009	8-719-055-30	DIODE D1FS4A-TA				
D7010	8-719-055-30	DIODE D1FS4A-TA				
D7015	8-719-510-41	DIODE D10SC9M				
D7016	8-719-510-41	DIODE D10SC9M				
D7020	8-719-914-43	DIODE DAN202K				
D7022	8-719-106-71	DIODE RD12M-B2				
D7023	8-719-106-71	DIODE RD12M-B2				
D7027	8-719-510-41	DIODE D10SC9M				
		<IC>				
IC7001	8-759-388-31	IC PQ20VZ1U				
IC7002	8-759-157-17	IC PQ05SZ1U				
IC7005	8-759-388-23	IC TL431BCDR2				
IC7008	8-759-557-46	IC LTC1624IS8-E2				
IC7009	8-759-557-46	IC LTC1624IS8-E2				
		<COIL>				
L7001	1-412-525-31	INDUCTOR	10UH			
L7002	1-406-663-21	INDUCTOR	0UH			
L7003	1-406-666-61	INDUCTOR	0UH			
L7005	1-406-660-41	INDUCTOR	0UH			
L7006	1-406-659-11	INDUCTOR	0UH			
L7007	1-412-525-31	INDUCTOR	10UH			
		<IC LINK>				
PS7001 ⚠	1-533-282-21	LINK, IC (2A)				
PS7002 ⚠	1-576-124-21	LINK, IC (1A)				
PS7003 ⚠	1-533-282-21	LINK, IC (2A)				
		<TRANSISTOR>				
Q7001	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q7002	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q7003	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q7004	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q7007	8-729-040-83	TRANSISTOR SI4450DY-T1				
Q7008	8-729-040-83	TRANSISTOR SI4450DY-T1				
Q7079	8-729-230-49	TRANSISTOR 2SC2712-YG				
		<RESISTOR>				
R7001	1-220-267-11	RES,CHIP	180	5%	1/2W	
R7002	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7003	1-218-756-11	METAL CHIP	150K	0.50%	1/10W	
R7004	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R7005	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R7006	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R7007	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R7009	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R7010	1-215-866-11	METAL OXIDE	330	5%	1W	F
R7011	1-215-866-11	METAL OXIDE	330	5%	1W	F
R7012	1-215-866-11	METAL OXIDE	330	5%	1W	F
R7013	1-215-866-11	METAL OXIDE	330	5%	1W	F
R7029	1-220-268-11	RES,CHIP	270	5%	1/2W	
R7031	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R7032	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R7036	1-216-025-91	RES,CHIP	100	5%	1/10W	
R7037	1-218-756-11	METAL CHIP	150K	0.50%	1/10W	
R7038	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R7039	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R7040	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7041	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R7042	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7043	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	

REF NO.	PART NO.	DESCRIPTION				REMARK
R7044	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7045	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R7046	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7047	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R7048	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7049	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7050	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R7051	1-216-025-91	RES,CHIP	100	5%	1/10W	
R7052	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R7053	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R7054	1-216-075-00	RES,CHIP	12K	5%	1/10W	
R7055	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R7057	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R7058	1-240-247-91	REGISTER	0.1	5%	1/2W	
R7059	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R7060	1-240-247-91	REGISTER	0.1	5%	1/2W	
R7061	1-216-041-00	RES,CHIP	470	5%	1/10W	
R7062	1-216-041-00	RES,CHIP	470	5%	1/10W	
R7063	1-216-041-00	RES,CHIP	470	5%	1/10W	
R7064	1-216-041-00	RES,CHIP	470	5%	1/10W	
R7067	1-216-421-11	METAL OXIDE	12	5%	1W	F
R7068	1-216-421-11	METAL OXIDE	12	5%	1W	F
R7070	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7071	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7078	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R7079	1-216-077-00	RES,CHIP	15K	5%	1/10W	
R7080	1-216-093-00	RES,CHIP	68K	5%	1/10W	
R7081	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R7082	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R7083	1-216-089-91	RES,CHIP	47K	5%	1/10W	

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* A-1375-175-A H COMPLETE PWB
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<CAPACITOR>

C6001	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

CN6001	1-764-007-11	PIN, CONNECTOR (SMD) 12P

<DIODE>

D6001	8-719-914-43	DIODE DAN202K
D6002	8-719-914-44	DIODE DAP202K
D6003	8-719-045-61	DIODE SEC1901C
D6004	8-719-045-61	DIODE SEC1901C
D6005	8-719-045-51	DIODE SEC2422C
D6007	8-719-045-53	DIODE SEC1801C
D6008	8-719-914-43	DIODE DAN202K
D6009	8-719-914-43	DIODE DAN202K
D6010	8-719-914-43	DIODE DAN202K
D6011	8-719-914-44	DIODE DAP202K
D6012	8-719-914-44	DIODE DAP202K
D6013	8-719-914-44	DIODE DAP202K
D6014	8-719-045-60	DIODE SEC1401C
D6015	8-719-045-53	DIODE SEC1801C
D6016	8-719-045-53	DIODE SEC1801C
D6017	8-719-045-53	DIODE SEC1801C
D6018	8-719-045-53	DIODE SEC1801C
D6019	8-719-045-53	DIODE SEC1801C
D6020	8-719-045-53	DIODE SEC1801C
D6021	8-719-045-53	DIODE SEC1801C
D6022	8-719-045-53	DIODE SEC1801C
D6023	8-719-045-53	DIODE SEC1801C
D6024	8-719-045-53	DIODE SEC1801C
D6025	8-719-045-53	DIODE SEC1801C
D6026	8-719-045-53	DIODE SEC1801C
D6027	8-719-045-53	DIODE SEC1801C
D6030	8-719-159-10	DIODE RD5.1SB-T2

<IC>

IC6001	8-719-066-43	DIODE GP1U28Y

<TRANSISTOR>

Q6001	8-729-027-38	TRANSISTOR DTA144EKA-T146
Q6002	8-729-230-49	TRANSISTOR 2SC2712-YG
Q6003	8-729-230-49	TRANSISTOR 2SC2712-YG
Q6004	8-729-230-49	TRANSISTOR 2SC2712-YG
Q6005	8-729-230-49	TRANSISTOR 2SC2712-YG

<RESISTOR>

R6001	1-216-083-00	RES,CHIP	27K	5%	1/10W
R6002	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6003	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6004	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R6005	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R6006	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6007	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6008	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6009	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6010	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6011	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R6012	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R6013	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6014	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6015	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6016	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6017	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6018	1-216-037-00	RES,CHIP	330	5%	1/10W
R6019	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6020	1-216-035-00	RES,CHIP	270	5%	1/10W
R6021	1-216-039-00	RES,CHIP	390	5%	1/10W
R6022	1-216-039-00	RES,CHIP	390	5%	1/10W
R6023	1-216-039-00	RES,CHIP	390	5%	1/10W
R6024	1-216-039-00	RES,CHIP	390	5%	1/10W
R6025	1-216-039-00	RES,CHIP	390	5%	1/10W
R6026	1-216-039-00	RES,CHIP	390	5%	1/10W
R6027	1-216-039-00	RES,CHIP	390	5%	1/10W
R6028	1-216-039-00	RES,CHIP	390	5%	1/10W
R6029	1-216-039-00	RES,CHIP	390	5%	1/10W
R6030	1-216-039-00	RES,CHIP	390	5%	1/10W
R6031	1-216-039-00	RES,CHIP	390	5%	1/10W
R6032	1-216-039-00	RES,CHIP	390	5%	1/10W
R6033	1-216-039-00	RES,CHIP	390	5%	1/10W
R6035	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R6036	1-216-061-00	RES,CHIP	3.3K	5%	1/10W

REF NO.	PART NO.	DESCRIPTION			REMARK
R6037	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R6038	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R6040	1-216-017-91	RES,CHIP	47	5%	1/10W
R6041	1-216-025-91	RES,CHIP	100	5%	1/10W
		<SWITCH>			
S6001	1-771-105-11	SWITCH, TACTILE (LEFT)			
S6002	1-771-105-11	SWITCH, TACTILE (RIGHT)			
S6003	1-771-105-11	SWITCH, TACTILE (DOWN)			
S6004	1-771-105-11	SWITCH, TACTILE (UP)			
S6005	1-771-105-11	SWITCH, TACTILE (ENTER)			
S6006	1-771-105-11	SWITCH, TACTILE (MENU)			
S6007	1-771-105-11	SWITCH, TACTILE (INPUT)			
S6008	1-771-105-11	SWITCH, TACTILE (POWER)			
S6010	1-771-105-11	SWITCH, TACTILE (DOT P)			
S6011	1-771-105-11	SWITCH, TACTILE (VOL -)			
S6012	1-771-105-11	SWITCH, TACTILE (VOL +)			
S6013	1-771-105-11	SWITCH, TACTILE (RESET)			
S6014	1-771-105-11	SWITCH, TACTILE (LIGHT)			
**********					
	* 1-670-476-11	NF BOARD ********			
		<CAPACITOR>			
C4007	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
		<CONNECTOR>			
CN4001	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P			
		<IC>			
IC4001	8-749-012-17	IC RS-140-T			
		<RESISTOR>			
R4001	1-216-017-91	RES,CHIP	47	5%	1/10W
R4002	1-216-025-91	RES,CHIP	100	5%	1/10W
**********					
	* A-1275-157-A	QA COMPLETE PWB **********			
		<CAPACITOR>			
C1001	1-126-204-11	ELECT CHIP	47MF	20%	16V
C1002	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1003	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C1005	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C1006	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1007	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1008	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1009	1-126-204-11	ELECT CHIP	47MF	20%	16V
C1010	1-126-204-11	ELECT CHIP	47MF	20%	16V
C1012	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C1014	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C1016	1-126-204-11	ELECT CHIP	47MF	20%	16V
C1017	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1019	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1020	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V

REF NO.	PART NO.	DESCRIPTION			REMARK
C1021	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C1022	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1029	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1031	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C1032	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1033	1-126-934-11	ELECT	220MF	20%	16V
C1034	1-135-192-21	TANTAL. CHIP	0.47MF	20%	20V
C1035	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1036	1-126-934-11	ELECT	220MF	20%	16V
C1037	1-135-214-21	TANTAL. CHIP	4.7MF	20%	20V
C1038	1-135-192-21	TANTAL. CHIP	0.47MF	20%	20V
C1039	1-117-681-11	ELECT CHIP	100MF	20%	16V
C1040	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1041	1-115-340-11	CERAMIC CHIP	0.22MF	10%	25V
C1042	1-115-340-11	CERAMIC CHIP	0.22MF	10%	25V
C1043	1-124-779-00	ELECT CHIP	10MF	20%	16V
C1044	1-126-601-11	ELECT CHIP	2.2MF	20%	50V
C1045	1-124-779-00	ELECT CHIP	10MF	20%	16V
C1101	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1102	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1204	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C1205	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1207	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1211	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C1212	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C1213	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1214	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1215	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C1216	1-164-346-11	CERAMIC CHIP	1MF		16V
C1217	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1218	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1219	1-117-681-11	ELECT CHIP	100MF	20%	16V
C1220	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1221	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1222	1-115-340-11	CERAMIC CHIP	0.22MF	10%	25V
C1223	1-113-577-11	ELECT	47MF	20%	16V
C1224	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1225	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1226	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1227	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C1228	1-126-191-11	ELECT CHIP	0.47MF	20%	50V
C1235	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1236	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C1237	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C1238	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C1239	1-126-204-11	ELECT CHIP	47MF	20%	16V
C1240	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1243	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C1244	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1246	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1247	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1248	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1249	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1250	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1251	1-117-681-11	ELECT CHIP	100MF	20%	16V
C1252	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1253	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

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REF NO.	PART NO.	DESCRIPTION			REMARK
C1254	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1255	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1256	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1257	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1258	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1259	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1260	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1262	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1263	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C1264	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1265	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1266	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1267	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1268	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1269	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1270	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1271	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1272	1-117-681-11	ELECT CHIP	100MF	20%	16V
C1273	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1274	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1275	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1276	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1277	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C1278	1-113-985-11	TANTAL. CHIP	10MF	20%	20V
C1279	1-126-395-11	ELECT CHIP	22MF	20%	16V
C1280	1-126-395-11	ELECT CHIP	22MF	20%	16V
		<CONNECTOR>			
CN1001	* 1-785-305-21	CONNECTOR, BOARD TO BOARD 70P			
CN1002	1-569-775-21	PIN, CONNECTOR 5P			
CN1003	1-580-057-11	PIN, CONNECTOR 4P			
CN1004	1-566-850-41	CONNECTOR, (S) TERMINAL 4P			
		<DIODE>			
D1001	8-719-158-37	DIODE RD9.1SB2			
D1002	8-719-158-37	DIODE RD9.1SB2			
D1003	8-719-158-37	DIODE RD9.1SB2			
D1004	8-719-158-37	DIODE RD9.1SB2			
D1005	8-719-158-37	DIODE RD9.1SB2			
D1006	8-719-158-37	DIODE RD9.1SB2			
D1007	8-719-158-37	DIODE RD9.1SB2			
D1008	8-719-158-37	DIODE RD9.1SB2			
D1009	8-719-158-37	DIODE RD9.1SB2			
D1010	8-719-036-76	DIODE RD3.3SB2-T1			
D1011	8-719-914-43	DIODE DAN202K			
D1012	8-719-988-62	DIODE 1SS355			
D1013	8-719-158-15	DIODE RD5.6SB			
D1201	8-719-914-43	DIODE DAN202K			
		<FILTER>			
FL1201	1-239-397-11	FILTER, LOW PASS			
FL1202	1-239-397-11	FILTER, LOW PASS			
FL1203	1-239-397-11	FILTER, LOW PASS			
		<IC>			
IC1001	8-759-082-61	IC TC4W53FU			
IC1002	8-759-082-61	IC TC4W53FU			
IC1003	8-752-083-07	IC CXA1846AN-T4			
IC1004	8-759-701-54	IC NJM2073D			
IC1101	8-752-072-94	IC CXA1875AM-T4			
IC1102	8-752-072-94	IC CXA1875AM-T4			
IC1201	8-759-288-85	IC TDA4665T-T			
IC1202	8-759-490-50	IC TDA9143/S1			
IC1203	8-759-432-78	IC MM1111XFBE			
IC1204	8-759-492-19	IC MM1231XFBE			
IC1205	8-752-390-37	IC CXD2064Q-T6			
IC1206	8-759-058-58	IC TC7S04FU(TE85R)			
		<JACK>			
J1001	1-695-865-11	JACK, PIN 3P (VIDEO			
J1002	1-563-935-11	JACK, STEREO HEADPHONE (AUDIO INPUT A)			
J1003	1-563-935-11	JACK, STEREO HEADPHONE (AUDIO OUT)			
		<COIL>			
L1001	1-412-363-21	FERRITE	0UH		
L1002	1-412-363-21	FERRITE	0UH		
L1003	1-412-363-21	FERRITE	0UH		
L1004	1-412-363-21	FERRITE	0UH		
L1005	1-412-363-21	FERRITE	0UH		
L1006	1-412-363-21	FERRITE	0UH		
L1007	1-412-363-21	FERRITE	0UH		
L1008	1-412-363-21	FERRITE	0UH		
L1009	1-412-363-21	FERRITE	0UH		
L1202	1-414-235-11	INDUCTOR CHIP	0UH		
L1204	1-414-235-11	INDUCTOR CHIP	0UH		
L1205	1-412-796-41	INDUCTOR	47UH		
L1206	1-414-235-11	INDUCTOR CHIP	0UH		
L1207	1-414-235-11	INDUCTOR CHIP	0UH		
		<TRANSISTOR>			
Q1001	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1002	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1003	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1004	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1005	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1006	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1007	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1008	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1101	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1102	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1103	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1201	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1202	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1204	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1205	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1206	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1207	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1208	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1209	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1210	8-729-107-31	TRANSISTOR 2SC3545-T43			
Q1211	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1212	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1213	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1214	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1215	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1216	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1217	8-729-230-49	TRANSISTOR 2SC2712-YG			

REF NO.	PART NO.	DESCRIPTION			REMARK
Q1218	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1219	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1220	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1221	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1222	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1223	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1224	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1225	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1226	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1227	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1228	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1229	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1230	8-729-216-22	TRANSISTOR 2SA1162-G			
		<RESISTOR>			
R1001	1-216-025-91	RES,CHIP	100	5%	1/10W
R1002	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R1003	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1004	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R1006	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R1008	1-216-295-91	SHORT	0		
R1009	1-216-025-91	RES,CHIP	100	5%	1/10W
R1010	1-216-025-91	RES,CHIP	100	5%	1/10W
R1011	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1012	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1013	1-216-025-91	RES,CHIP	100	5%	1/10W
R1014	1-216-025-91	RES,CHIP	100	5%	1/10W
R1015	1-216-025-91	RES,CHIP	100	5%	1/10W
R1016	1-216-025-91	RES,CHIP	100	5%	1/10W
R1017	1-216-025-91	RES,CHIP	100	5%	1/10W
R1018	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1020	1-216-295-91	SHORT	0		
R1021	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1024	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1025	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1026	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1027	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1028	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1029	1-217-671-11	RES,CHIP	1	5%	1/10W
R1030	1-217-671-11	RES,CHIP	1	5%	1/10W
R1031	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1032	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1033	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1034	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1035	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1036	1-216-027-00	RES,CHIP	120	5%	1/10W
R1037	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1040	1-216-027-00	RES,CHIP	120	5%	1/10W
R1041	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1042	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1043	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1044	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1045	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1046	1-216-041-00	RES,CHIP	470	5%	1/10W
R1047	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1048	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1049	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1050	1-216-017-91	RES,CHIP	47	5%	1/10W
R1051	1-216-017-91	RES,CHIP	47	5%	1/10W
R1052	1-216-017-91	RES,CHIP	47	5%	1/10W
R1053	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1054	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1055	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1056	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1057	1-216-295-91	SHORT	0		
R1058	1-216-295-91	SHORT	0		
R1101	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1102	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1103	1-216-025-91	RES,CHIP	100	5%	1/10W
R1104	1-216-025-91	RES,CHIP	100	5%	1/10W
R1105	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1106	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1107	1-216-025-91	RES,CHIP	100	5%	1/10W
R1108	1-216-025-91	RES,CHIP	100	5%	1/10W
R1109	1-216-025-91	RES,CHIP	100	5%	1/10W
R1110	1-216-025-91	RES,CHIP	100	5%	1/10W
R1111	1-216-025-91	RES,CHIP	100	5%	1/10W
R1112	1-216-025-91	RES,CHIP	100	5%	1/10W
R1113	1-216-025-91	RES,CHIP	100	5%	1/10W
R1114	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1115	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1116	1-216-025-91	RES,CHIP	100	5%	1/10W
R1117	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1118	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1119	1-216-025-91	RES,CHIP	100	5%	1/10W
R1120	1-216-025-91	RES,CHIP	100	5%	1/10W
R1121	1-216-025-91	RES,CHIP	100	5%	1/10W
R1122	1-216-025-91	RES,CHIP	100	5%	1/10W
R1123	1-216-025-91	RES,CHIP	100	5%	1/10W
R1124	1-216-025-91	RES,CHIP	100	5%	1/10W
R1125	1-216-025-91	RES,CHIP	100	5%	1/10W
R1126	1-216-025-91	RES,CHIP	100	5%	1/10W
R1201	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1202	1-216-025-91	RES,CHIP	100	5%	1/10W
R1203	1-216-025-91	RES,CHIP	100	5%	1/10W
R1204	1-216-295-91	SHORT	0		
R1205	1-216-295-91	SHORT	0		
R1206	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1207	1-216-295-91	SHORT	0		
R1208	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1209	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1210	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R1211	1-216-295-91	SHORT	0		
R1212	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1213	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1214	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1215	1-216-025-91	RES,CHIP	100	5%	1/10W
R1216	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1217	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1218	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1219	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1220	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1221	1-216-033-00	RES,CHIP	220	5%	1/10W
R1222	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1223	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1224	1-216-025-91	RES,CHIP	100	5%	1/10W
R1225	1-216-049-91	RES,CHIP	1K	5%	1/10W

QA **QB**

REF NO.	PART NO.	DESCRIPTION			REMARK
R1226	1-216-047-91	RES,CHIP	820	5%	1/10W
R1227	1-216-025-91	RES,CHIP	100	5%	1/10W
R1228	1-216-025-91	RES,CHIP	100	5%	1/10W
R1229	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1230	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1231	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1232	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1233	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1234	1-216-652-11	METAL CHIP	1.1K	0.50%	1/10W
R1235	1-216-025-91	RES,CHIP	100	5%	1/10W
R1236	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1237	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1238	1-216-047-91	RES,CHIP	820	5%	1/10W
R1239	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1240	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1241	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1242	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1243	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R1244	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1245	1-216-041-00	RES,CHIP	470	5%	1/10W
R1246	1-216-017-91	RES,CHIP	47	5%	1/10W
R1247	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1248	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1249	1-216-025-91	RES,CHIP	100	5%	1/10W
R1250	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1251	1-216-025-91	RES,CHIP	100	5%	1/10W
R1252	1-216-013-00	RES,CHIP	33	5%	1/10W
R1253	1-216-025-91	RES,CHIP	100	5%	1/10W
R1254	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1255	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1256	1-216-295-91	SHORT	0		
R1257	1-216-017-91	RES,CHIP	47	5%	1/10W
R1258	1-216-017-91	RES,CHIP	47	5%	1/10W
R1260	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1261	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1262	1-216-045-00	RES,CHIP	680	5%	1/10W
R1263	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1264	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1265	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1266	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1267	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1268	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1269	1-216-041-00	RES,CHIP	470	5%	1/10W
R1270	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1271	1-216-041-00	RES,CHIP	470	5%	1/10W
R1272	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1273	1-216-041-00	RES,CHIP	470	5%	1/10W
R1274	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R1275	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R1276	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R1277	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1278	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1279	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1280	1-216-295-91	SHORT	0		
R1281	1-216-041-00	RES,CHIP	470	5%	1/10W
R1282	1-216-041-00	RES,CHIP	470	5%	1/10W
R1283	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R1284	1-216-295-91	SHORT	0		

REF NO.	PART NO.	DESCRIPTION			REMARK
R1285	1-216-025-91	RES,CHIP	100	5%	1/10W
R1286	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1287	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1290	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1291	1-216-043-91	RES,CHIP	560	5%	1/10W
R1292	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1293	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1294	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1295	1-216-043-91	RES,CHIP	560	5%	1/10W
R1296	1-216-043-91	RES,CHIP	560	5%	1/10W
R1297	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1298	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1299	1-216-043-91	RES,CHIP	560	5%	1/10W
R1300	1-216-049-91	RES,CHIP	1K	5%	1/10W
		<SWITCH>			
S1001	1-570-245-11	SWITCH, MICRO (FILTER COVER)			
		<CRYSTAL>			
X1201	1-760-191-11	VIBRATOR, CRYSTAL (3.579545MHz)			
X1202	1-579-973-11	VIBRATOR, CRYSTAL (3.575611MHz)			
X1203	1-760-191-11	VIBRATOR, CRYSTAL (4.433618MHz)			
**********					
	* A-1275-158-A	QB COMPLETE PWB			
		**********			
		<CAPACITOR>			
C2001	1-126-204-11	ELECT CHIP	47MF	20%	16V
C2002	1-126-204-11	ELECT CHIP	47MF	20%	16V
C2003	1-126-204-11	ELECT CHIP	47MF	20%	16V
C2007	1-124-779-00	ELECT CHIP	10MF	20%	16V
C2008	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2009	1-126-204-11	ELECT CHIP	47MF	20%	16V
C2010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2011	1-164-506-11	CERAMIC CHIP	4.7MF		16V
C2012	1-164-506-11	CERAMIC CHIP	4.7MF		16V
C2013	1-109-982-11	CERAMIC CHIP	1MF	10%	10V
C2014	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C2015	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C2016	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2017	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C2018	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C2019	1-117-681-11	ELECT CHIP	100MF	20%	16V
C2020	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C2021	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2022	1-104-601-11	ELECT CHIP	10MF	20%	10V
C2023	1-104-601-11	ELECT CHIP	10MF	20%	10V
C2024	1-104-601-11	ELECT CHIP	10MF	20%	10V
C2025	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2028	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2029	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V
C2030	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2031	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C2032	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C2101	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2102	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2103	1-163-251-11	CERAMIC CHIP	100PF	5%	50V

REF NO.	PART NO.	DESCRIPTION				REMARK
C2104	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C2105	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C2106	1-126-934-11	ELECT	220MF	20%	16V	
C2107	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
		<CONNECTOR>				
CN2001	1-784-828-11	CONNECTOR, D SUB				
CN2002	* 1-785-306-21	CONNECTOR, BOARD TO BOARD70P				
CN2003	* 1-785-305-21	CONNECTOR, BOARD TO BOARD 70P				
CN2004	* 1-785-305-21	CONNECTOR, BOARD TO BOARD 70P				
CN2101	1-778-830-21	CONNECTOR (BUS)				
		<DIODE>				
D2001	8-719-800-76	DIODE 1SS226				
D2002	8-719-800-76	DIODE 1SS226				
D2003	8-719-800-76	DIODE 1SS226				
D2004	8-719-800-76	DIODE 1SS226				
D2005	8-719-800-76	DIODE 1SS226				
D2006	8-719-158-15	DIODE RD5.6SB				
D2007	8-719-158-15	DIODE RD5.6SB				
D2008	8-719-158-15	DIODE RD5.6SB				
D2009	8-719-158-15	DIODE RD5.6SB				
D2101	8-719-158-37	DIODE RD9.1SB2				
D2102	8-719-158-15	DIODE RD5.6SB				
D2103	8-719-158-15	DIODE RD5.6SB				
D2104	8-719-158-15	DIODE RD5.6SB				
D2105	8-719-158-15	DIODE RD5.6SB				
D2106	8-719-158-15	DIODE RD5.6SB				
D2107	8-719-158-15	DIODE RD5.6SB				
D2108	8-719-158-15	DIODE RD5.6SB				
D2109	8-719-158-15	DIODE RD5.6SB				
D2110	8-719-158-15	DIODE RD5.6SB				
D2111	8-719-158-15	DIODE RD5.6SB				
D2112	8-719-158-15	DIODE RD5.6SB				
D2113	8-719-988-62	DIODE 1SS355				
D2114	8-719-988-62	DIODE 1SS355				
D2115	8-719-988-62	DIODE 1SS355				
D2116	8-719-988-62	DIODE 1SS355				
D2118	8-719-158-15	DIODE RD5.6SB				
D2119	8-719-058-24	DIODE RB501V-40TE-17				
		<FERRITE BEAD>				
FB2101	1-414-234-11	INDUCTOR CHIP	0UH			
FB2102	1-414-234-11	INDUCTOR CHIP	0UH			
FB2103	1-414-234-11	INDUCTOR CHIP	0UH			
FB2104	1-414-234-11	INDUCTOR CHIP	0UH			
FB2105	1-414-234-11	INDUCTOR CHIP	0UH			
FB2106	1-414-234-11	INDUCTOR CHIP	0UH			
FB2107	1-414-234-11	INDUCTOR CHIP	0UH			
FB2108	1-414-234-11	INDUCTOR CHIP	0UH			
FB2109	1-414-234-11	INDUCTOR CHIP	0UH			
FB2110	1-414-234-11	INDUCTOR CHIP	0UH			
FB2111	1-414-234-11	INDUCTOR CHIP	0UH			
FB2112	1-414-234-11	INDUCTOR CHIP	0UH			
		<IC>				
IC2001	8-752-073-52	IC CXA2016S				
IC2002	8-759-185-90	IC TC74VHC221AF(EL)				
IC2103	8-759-553-48	IC RCV2				

REF NO.	PART NO.	DESCRIPTION				REMARK
		<COIL>				
L2001	1-414-235-11	INDUCTOR CHIP	0UH			
L2002	1-412-363-21	FERRITE	0UH			
L2003	1-412-363-21	FERRITE	0UH			
L2004	1-412-363-21	FERRITE	0UH			
		<TRANSISTOR>				
Q2001	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2002	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2003	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2004	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2005	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2006	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2007	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2008	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2009	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2010	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2101	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2102	1-801-806-11	TRANSISTOR DTC144EKA-T146				
		<RESISTOR>				
R2001	1-216-295-91	SHORT	0			
R2002	1-216-295-91	SHORT	0			
R2003	1-216-624-11	METAL CHIP	75	0.50%	1/10W	
R2004	1-216-624-11	METAL CHIP	75	0.50%	1/10W	
R2005	1-216-624-11	METAL CHIP	75	0.50%	1/10W	
R2006	1-216-039-00	RES,CHIP	390	5%	1/10W	
R2007	1-216-039-00	RES,CHIP	390	5%	1/10W	
R2008	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R2009	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R2010	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R2011	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R2012	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R2013	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R2014	1-216-017-91	RES,CHIP	47	5%	1/10W	
R2015	1-216-017-91	RES,CHIP	47	5%	1/10W	
R2016	1-216-017-91	RES,CHIP	47	5%	1/10W	
R2017	1-216-035-00	RES,CHIP	270	5%	1/10W	
R2018	1-216-035-00	RES,CHIP	270	5%	1/10W	
R2019	1-216-035-00	RES,CHIP	270	5%	1/10W	
R2020	1-216-043-91	RES,CHIP	560	5%	1/10W	
R2022	1-216-043-91	RES,CHIP	560	5%	1/10W	
R2024	1-216-043-91	RES,CHIP	560	5%	1/10W	
R2026	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W	
R2027	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R2028	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W	
R2029	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R2030	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W	
R2031	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R2032	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R2033	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R2034	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R2035	1-216-017-91	RES,CHIP	47	5%	1/10W	
R2036	1-216-017-91	RES,CHIP	47	5%	1/10W	
R2037	1-216-017-91	RES,CHIP	47	5%	1/10W	
R2038	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2039	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R2040	1-216-081-00	RES,CHIP	22K	5%	1/10W	

REF NO.	PART NO.	DESCRIPTION			REMARK
R2041	1-216-017-91	RES,CHIP	47	5%	1/10W
R2042	1-216-017-91	RES,CHIP	47	5%	1/10W
R2043	1-216-017-91	RES,CHIP	47	5%	1/10W
R2044	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2045	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2046	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2047	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2048	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2049	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2050	1-216-025-91	RES,CHIP	100	5%	1/10W
R2051	1-216-025-91	RES,CHIP	100	5%	1/10W
R2052	1-216-025-91	RES,CHIP	100	5%	1/10W
R2053	1-216-017-91	RES,CHIP	47	5%	1/10W
R2054	1-216-017-91	RES,CHIP	47	5%	1/10W
R2055	1-216-017-91	RES,CHIP	47	5%	1/10W
R2056	1-216-017-91	RES,CHIP	47	5%	1/10W
R2057	1-216-017-91	RES,CHIP	47	5%	1/10W
R2058	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R2059	1-216-017-91	RES,CHIP	47	5%	1/10W
R2060	1-216-017-91	RES,CHIP	47	5%	1/10W
R2061	1-216-017-91	RES,CHIP	47	5%	1/10W
R2062	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2063	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R2065	1-216-025-91	RES,CHIP	100	5%	1/10W
R2066	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R2069	1-216-025-91	RES,CHIP	100	5%	1/10W
R2075	1-216-035-00	RES,CHIP	270	5%	1/10W
R2076	1-216-009-00	RES,CHIP	22	5%	1/10W
R2077	1-216-019-00	RES,CHIP	56	5%	1/10W
R2078	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2079	1-216-025-91	RES,CHIP	100	5%	1/10W
R2101	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2102	1-216-025-91	RES,CHIP	100	5%	1/10W
R2103	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2104	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2105	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2106	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2107	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2109	1-216-025-91	RES,CHIP	100	5%	1/10W
R2110	1-216-025-91	RES,CHIP	100	5%	1/10W
R2111	1-216-025-91	RES,CHIP	100	5%	1/10W
R2112	1-216-025-91	RES,CHIP	100	5%	1/10W
R2113	1-216-025-91	RES,CHIP	100	5%	1/10W
R2114	1-216-025-91	RES,CHIP	100	5%	1/10W
R2116	1-216-017-91	RES,CHIP	47	5%	1/10W
R2117	1-216-017-91	RES,CHIP	47	5%	1/10W
R2118	1-216-121-91	RES,CHIP	1M	5%	1/10W
R2119	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2120	1-216-091-00	RES,CHIP	56K	5%	1/10W
R2123	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2124	1-216-091-00	RES,CHIP	56K	5%	1/10W
R2126	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2127	1-216-025-91	RES,CHIP	100	5%	1/10W
R2128	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2129	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2130	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2131	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2132	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2133	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2135	1-216-091-00	RES,CHIP	56K	5%	1/10W

<SWITCH>

S2001	1-570-134-11	SWITCH, SLIDE
S2002	1-570-134-11	SWITCH, SLIDE
S2003	1-762-984-11	SWITCH, PUSH (LAMP COVER)

<THERMISTOR>

TH2001	1-809-020-11	THERMISTOR

<CRYSTAL>

X2101	1-578-689-21	VIBRATOR (8MHz)

****

MISCELLANEOUS
****

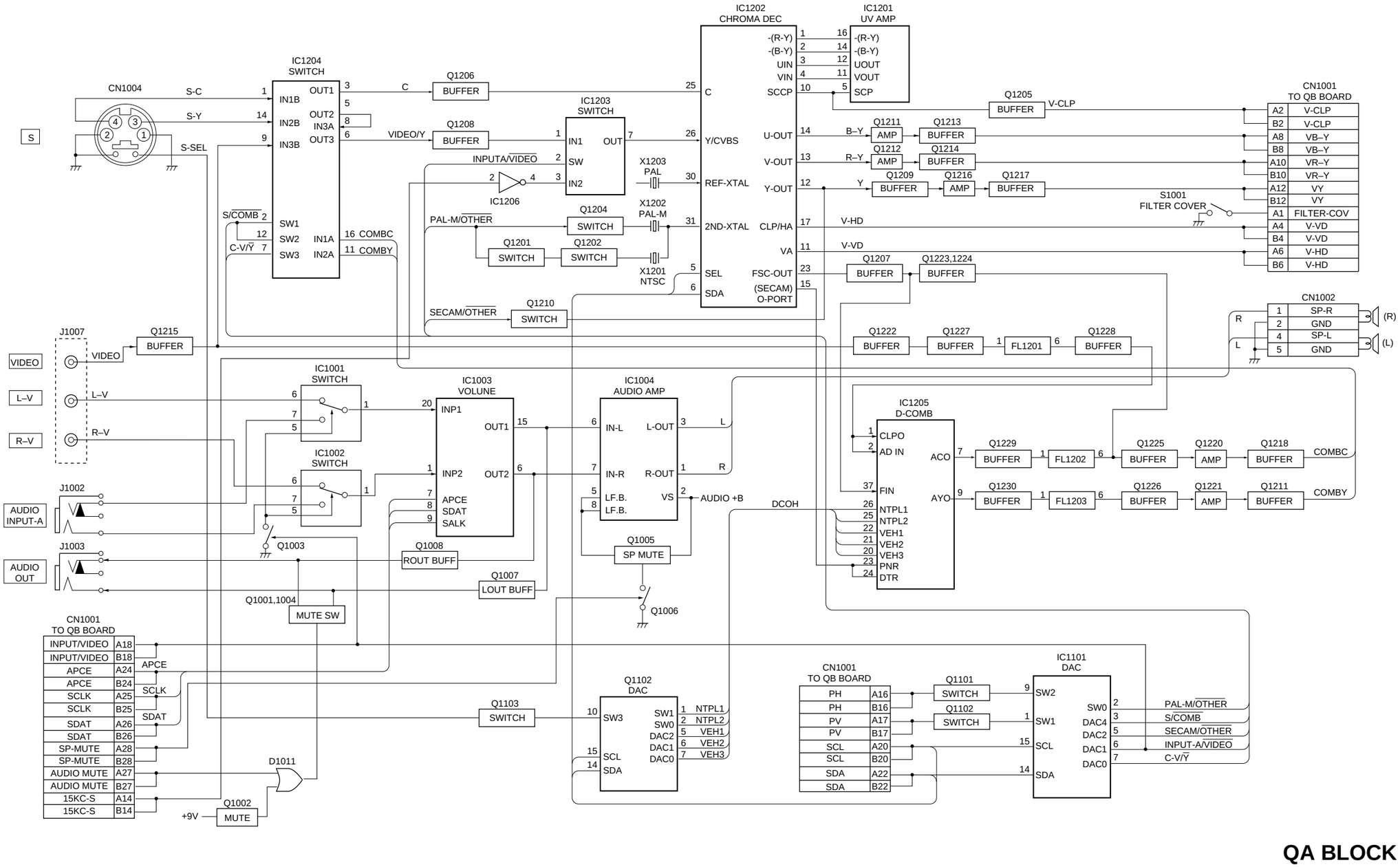
	1-504-688-11	SPEAKER (3.6CM)
	1-763-173-11	FAN, DC
	1-504-688-11	SPEAKER (3.6CM)
⚠	1-526-954-11	INLET, AC
	1-763-172-11	FAN, DC
	1-500-082-11	CLAMP, SLEEVE FERRITE
	1-500-249-11	BEAD, FERRITE (CASE)
	1-763-101-21	FAN, DC

****

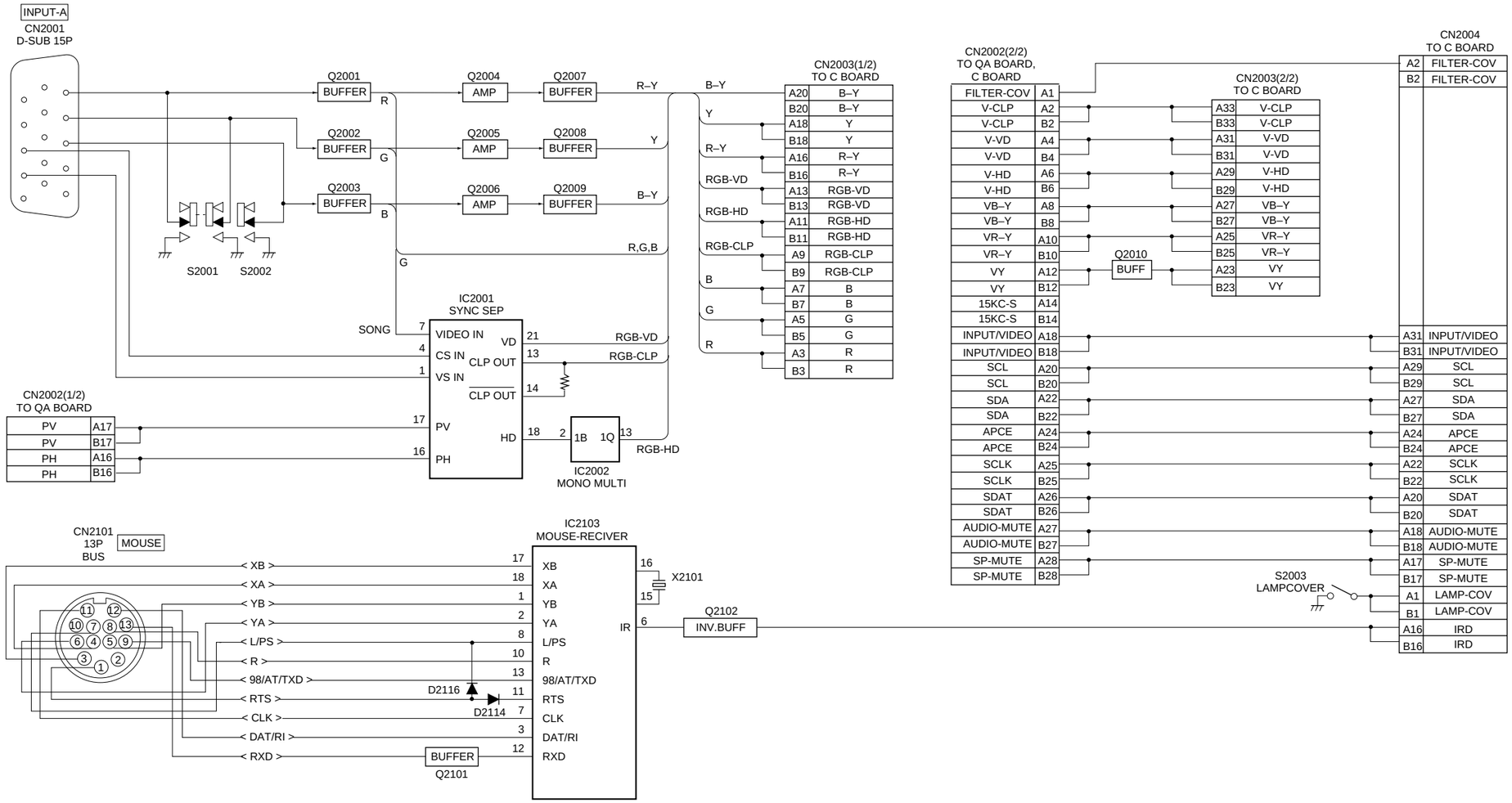
ACCESSORY & PACKING MATERIAL
****

	1-475-735-21	REMOTE COMMANDER (RM-PJM600)
	9-880-535-01	BATTERY COVER (For RM-PJM600)
	1-534-827-14	CORD, POWER
	1-575-334-11	CORD, CONNECTION
⚠	1-774-626-11	ADAPTOR, CONVERSION
	1-777-743-11	CABLE ASSY(15PDSUBX2CONNECTOR)
	3-864-641-11	OPERATING INSTRUCTIONS (E/F/S)
	4-066-191-02	FILTER

SECTION 7
BLOCK DIAGRAMS

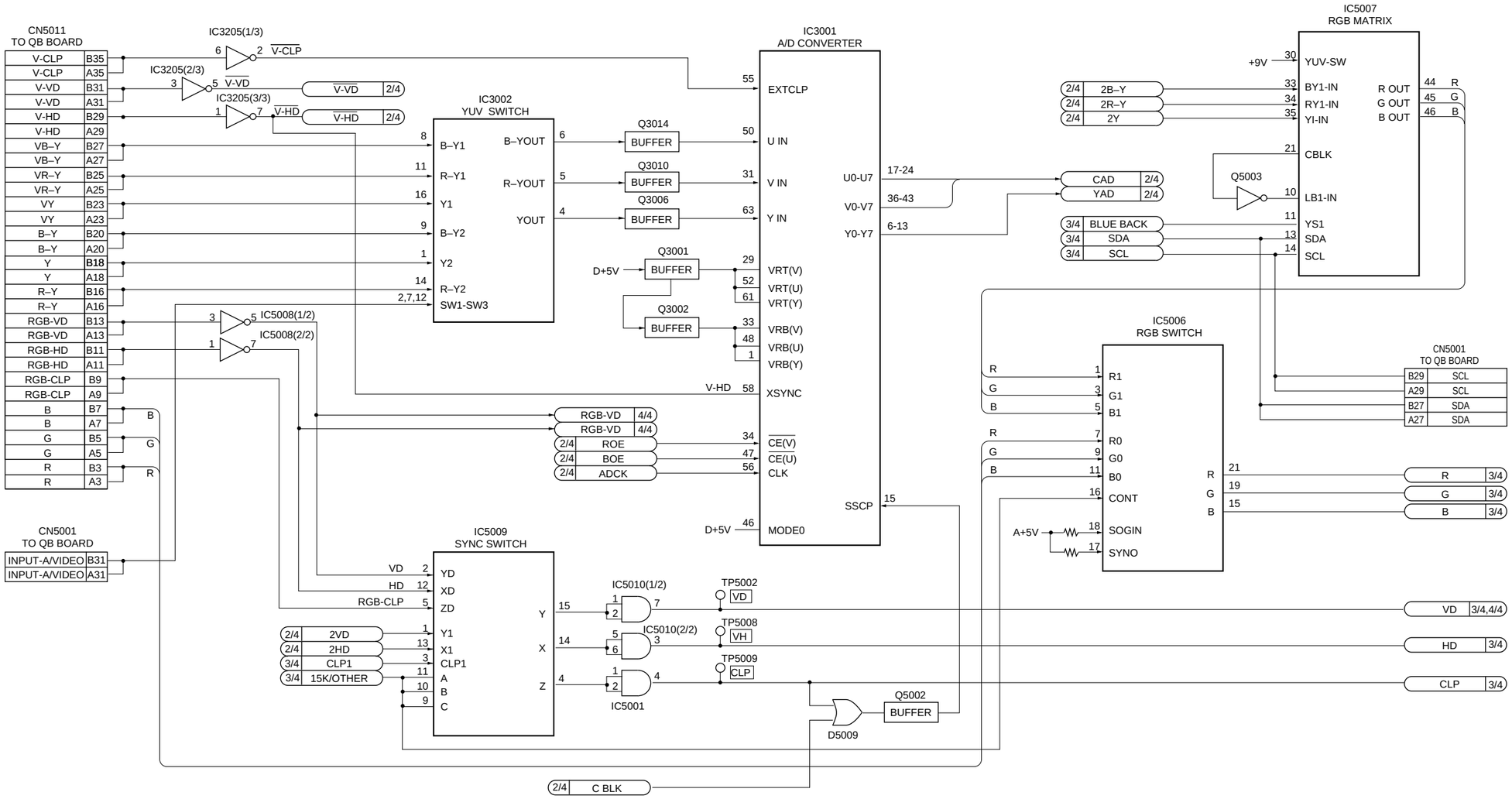


QA BLOCK

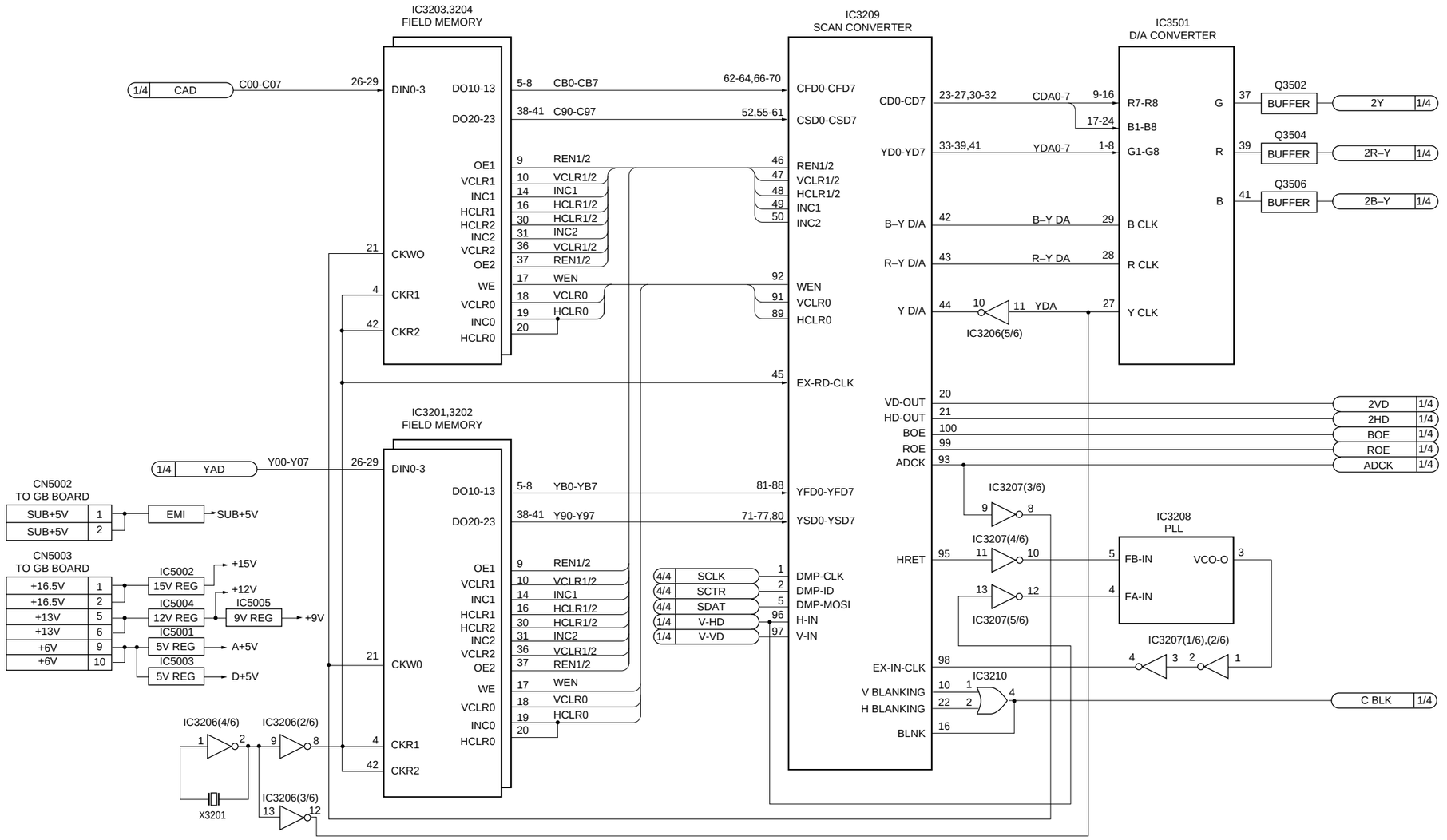

INPUT-A
CN2001
D-SUB 15P
Q2001
BUFFER
Q2002
BUFFER
Q2003
BUFFER
R
G
B
Q2004
AMP
Q2005
AMP
Q2006
AMP
Q2007
BUFFER
Q2008
BUFFER
Q2009
BUFFER
R–Y
Y
B–Y
R,G,B
S2001
S2002
CN2003(1/2)
TO C BOARD
A20 B–Y
B20 B–Y
A18 Y
B18 Y
A16 R–Y
B16 R–Y
A13 RGB-VD
B13 RGB-VD
A11 RGB-HD
B11 RGB-HD
A9 RGB-CLP
B9 RGB-CLP
A7 B
B7 B
A5 G
B5 G
A3 R
B3 R
IC2001
SYNC SEP
SONG
VIDEO IN
CS IN
VS IN
CLP OUT
CLP OUT
PV
PH
VD
HD
RGB-VD
RGB-CLP
RGB-HD
IC2002
MONO MULTI
1B
1Q
CN2002(1/2)
TO QA BOARD
PV A17
PV B17
PH A16
PH B16
CN2101
13P
BUS
MOUSE
XB
XA
YB
YA
L/PS
R
98/AT/TXD
RTS
CLK
DAT/RI
RXD
IC2103
MOUSE-RECIVER
X2101
IR
Q2102
INV.BUFF
D2116
D2114
BUFFER
Q2101
CN2002(2/2)
TO QA BOARD,
C BOARD
FILTER-COV A1
V-CLP A2
V-CLP B2
V-VD A4
V-VD B4
V-HD A6
V-HD B6
VB–Y A8
VB–Y B8
VR–Y A10
VR–Y B10
VY A12
VY B12
15KC-S A14
15KC-S B14
INPUT/VIDEO A18
INPUT/VIDEO B18
SCL A20
SCL B20
SDA A22
SDA B22
APCE A24
APCE B24
SCLK A25
SCLK B25
SDAT A26
SDAT B26
AUDIO-MUTE A27
AUDIO-MUTE B27
SP-MUTE A28
SP-MUTE B28
Q2010
BUFF
CN2003(2/2)
TO C BOARD
A33 V-CLP
B33 V-CLP
A31 V-VD
B31 V-VD
A29 V-HD
B29 V-HD
A27 VB–Y
B27 VB–Y
A25 VR–Y
B25 VR–Y
A23 VY
B23 VY
CN2004
TO C BOARD
A2 FILTER-COV
B2 FILTER-COV
A31 INPUT/VIDEO
B31 INPUT/VIDEO
A29 SCL
B29 SCL
A27 SDA
B27 SDA
A24 APCE
B24 APCE
A22 SCLK
B22 SCLK
A20 SDAT
B20 SDAT
A18 AUDIO-MUTE
B18 AUDIO-MUTE
A17 SP-MUTE
B17 SP-MUTE
A1 LAMP-COV
B1 LAMP-COV
A16 IRD
B16 IRD
S2003
LAMPCOVER

QB BLOCK

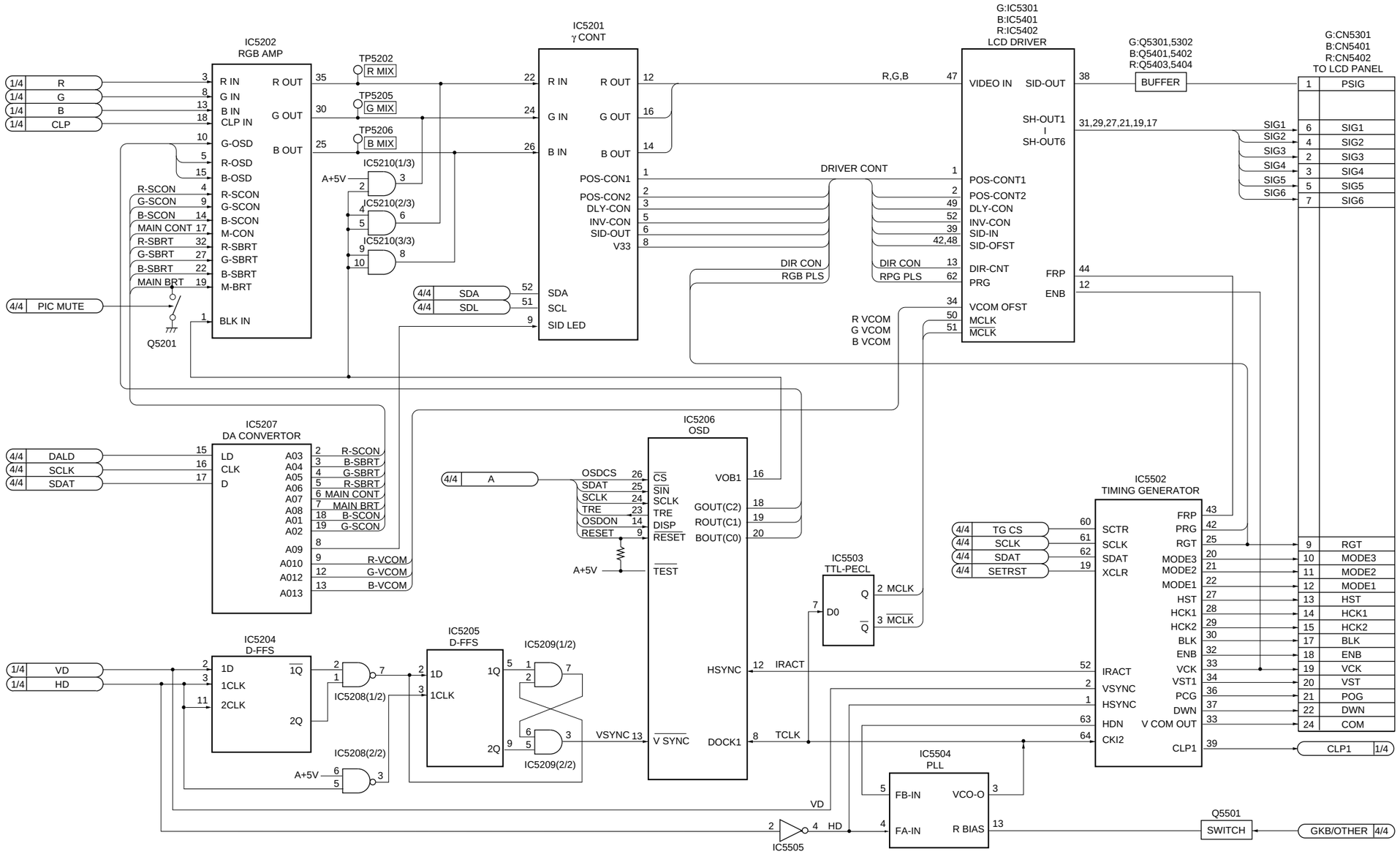
http://getMANUAL.com



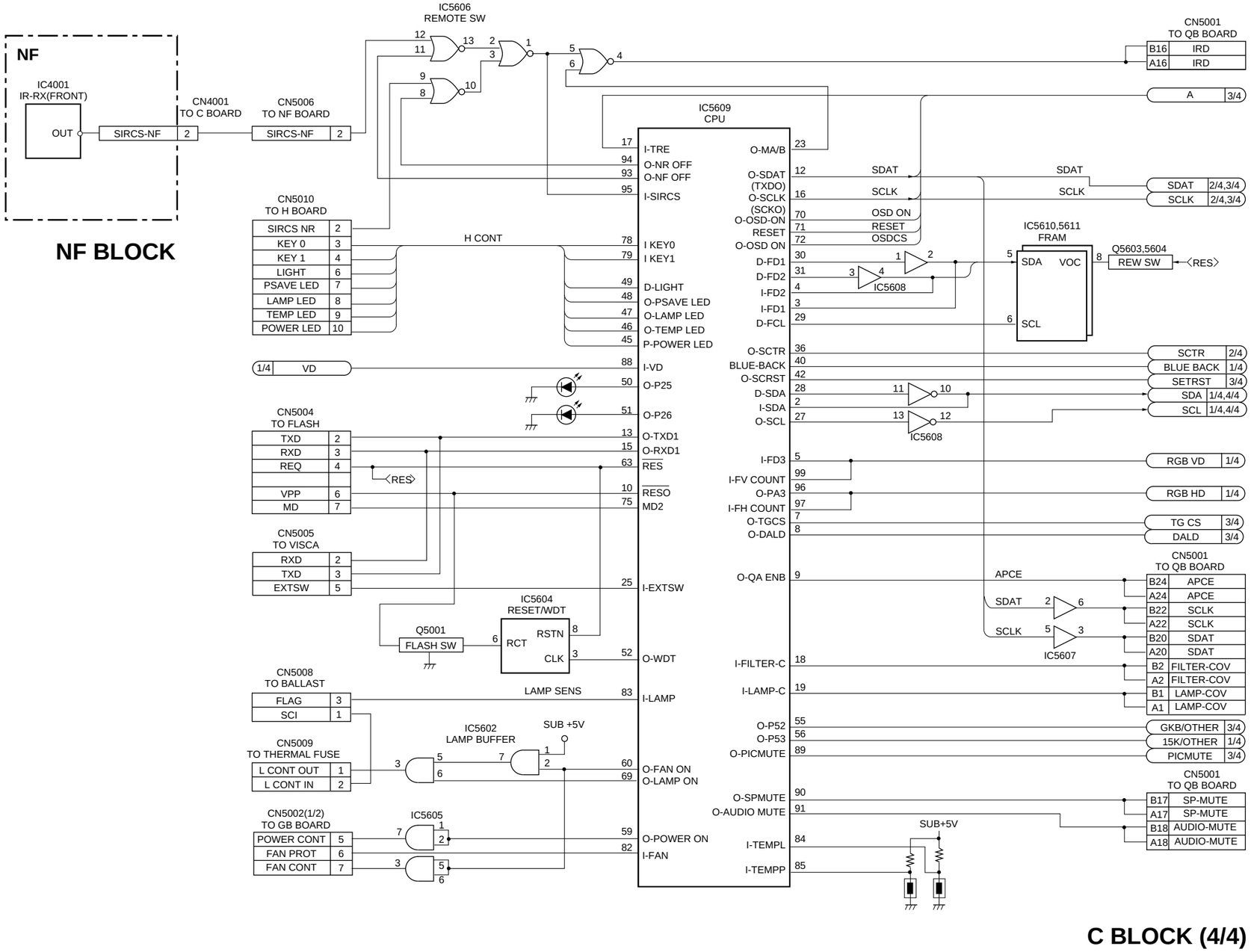
C BLOCK (1/4)


IC3203,3204
FIELD MEMORY
IC3209
SCAN CONVERTER
IC3501
D/A CONVERTER
1/4 CAD
C00-C07
26-29
DIN0-3
DO10-13
DO20-23
5-8 CB0-CB7
62-64,66-70
CFD0-CFD7
38-41 C90-C97
52,55-61
CSD0-CSD7
OE1
VCLR1
INC1
HCLR1
HCLR2
INC2
VCLR2
OE2
WE
VCLR0
INC0
HCLR0
9 REN1/2
10 VCLR1/2
14 INC1
16 HCLR1/2
30 HCLR1/2
31 INC2
36 VCLR1/2
37 REN1/2
17 WEN
18 VCLR0
19 HCLR0
20
46
47
48
49
50
REN1/2
VCLR1/2
HCLR1/2
INC1
INC2
92
91
89
WEN
VCLR0
HCLR0
21
CKWO
4
CKR1
42
CKR2
45
EX-RD-CLK
CD0-CD7
23-27,30-32
CDA0-7
9-16
17-24
R7-R8
B1-B8
G1-G8
YD0-YD7
33-39,41
YDA0-7
1-8
B–Y D/A
42
B–Y DA
29
B CLK
R–Y D/A
43
R–Y DA
28
R CLK
Y D/A
44
10
11
YDA
27
Y CLK
IC3206(5/6)
G
R
B
37
39
41
Q3502
Q3504
Q3506
BUFFER
2Y
2R–Y
2B–Y
1/4
IC3201,3202
FIELD MEMORY
1/4 YAD
Y00-Y07
5-8 YB0-YB7
81-88
YFD0-YFD7
38-41 Y90-Y97
71-77,80
YSD0-YSD7
4/4 SCLK
4/4 SCTR
4/4 SDAT
1/4 V-HD
1/4 V-VD
1
2
5
96
97
DMP-CLK
DMP-ID
DMP-MOSI
H-IN
V-IN
VD-OUT
HD-OUT
BOE
ROE
ADCK
20
21
100
99
93
2VD
2HD
BOE
ROE
ADCK
IC3207(3/6)
IC3207(4/6)
IC3207(5/6)
HRET
95
IC3208
PLL
FB-IN
FA-IN
VCO-O
5
4
3
IC3207(1/6),(2/6)
EX-IN-CLK
98
IC3210
V BLANKING
H BLANKING
10
22
16
C BLK
1/4
CN5002
TO GB BOARD
SUB+5V 1
SUB+5V 2
EMI
SUB+5V
CN5003
TO GB BOARD
+16.5V 1
+16.5V 2
+13V 5
+13V 6
+6V 9
+6V 10
IC5002
15V REG
+15V
IC5004
12V REG
+12V
IC5005
9V REG
+9V
IC5001
5V REG
A+5V
IC5003
5V REG
D+5V
IC3206(4/6)
IC3206(2/6)
IC3206(3/6)
X3201

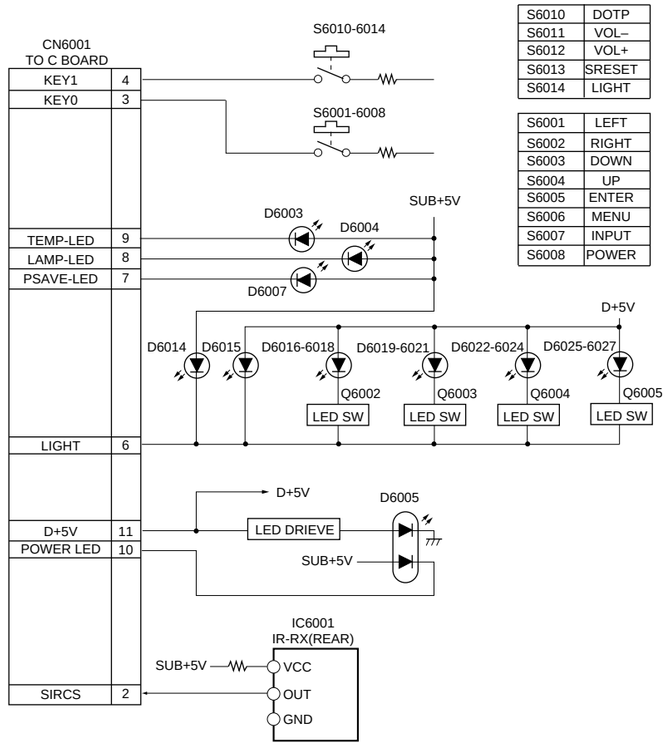
C BLOCK (2/4)


IC5202
RGB AMP
R IN
G IN
B IN
CLP IN
G-OSD
R-OSD
B-OSD
R-SCON
G-SCON
B-SCON
M-CON
R-SBRT
G-SBRT
B-SBRT
M-BRT
BLK IN
R OUT
G OUT
B OUT
TP5202
R MIX
TP5205
G MIX
TP5206
B MIX
IC5210(1/3)
IC5210(2/3)
IC5210(3/3)
A+5V
IC5201
γ CONT
R IN
G IN
B IN
POS-CON1
POS-CON2
DLY-CON
INV-CON
SID-OUT
V33
SDA
SCL
SID LED
R OUT
G OUT
B OUT
R,G,B
DRIVER CONT
DIR CON
RGB PLS
G:IC5301
B:IC5401
R:IC5402
LCD DRIVER
VIDEO IN
SID-OUT
SH-OUT1
I
SH-OUT6
POS-CONT1
POS-CONT2
DLY-CON
INV-CON
SID-IN
SID-OFST
DIR-CNT
PRG
VCOM OFST
MCLK
MCLK
FRP
ENB
DIR CON
RPG PLS
R VCOM
G VCOM
B VCOM
G:Q5301,5302
B:Q5401,5402
R:Q5403,5404
BUFFER
31,29,27,21,19,17
SIG1
SIG2
SIG3
SIG4
SIG5
SIG6
G:CN5301
B:CN5401
R:CN5402
TO LCD PANEL
PSIG
SIG1
SIG2
SIG3
SIG4
SIG5
SIG6
R
G
B
CLP
PIC MUTE
Q5201
MAIN CONT
MAIN BRT
SDA
SDL
IC5207
DA CONVERTOR
LD
CLK
D
A03
A04
A05
A06
A07
A08
A01
A02
A09
A010
A012
A013
DALD
SCLK
SDAT
R-SCON
B-SBRT
G-SBRT
R-SBRT
MAIN CONT
MAIN BRT
B-SCON
G-SCON
R-VCOM
G-VCOM
B-VCOM
IC5206
OSD
OSDCS
SDAT
SCLK
TRE
OSDON
RESET
CS
SIN
SCLK
TRE
DISP
RESET
TEST
VOB1
GOUT(C2)
ROUT(C1)
BOUT(C0)
A
IC5503
TTL-PECL
D0
Q
Q
MCLK
MCLK
IC5502
TIMING GENERATOR
SCTR
SCLK
SDAT
XCLR
IRACT
VSYNC
HSYNC
HDN
CKI2
FRP
PRG
RGT
MODE3
MODE2
MODE1
HST
HCK1
HCK2
BLK
ENB
VCK
VST1
PCG
DWN
V COM OUT
CLP1
TG CS
SCLK
SDAT
SETRST
RGT
MODE3
MODE2
MODE1
HST
HCK1
HCK2
BLK
ENB
VCK
VST
POG
DWN
COM
CLP1
IC5204
D-FFS
1D
1CLK
2CLK
1Q
2Q
IC5208(1/2)
IC5208(2/2)
IC5205
D-FFS
IC5209(1/2)
IC5209(2/2)
VSYNC
V SYNC
HSYNC
DOCK1
IRACT
TCLK
VD
HD
IC5504
PLL
FB-IN
FA-IN
VCO-O
R BIAS
IC5505
Q5501
SWITCH
GKB/OTHER

C BLOCK (3/4)

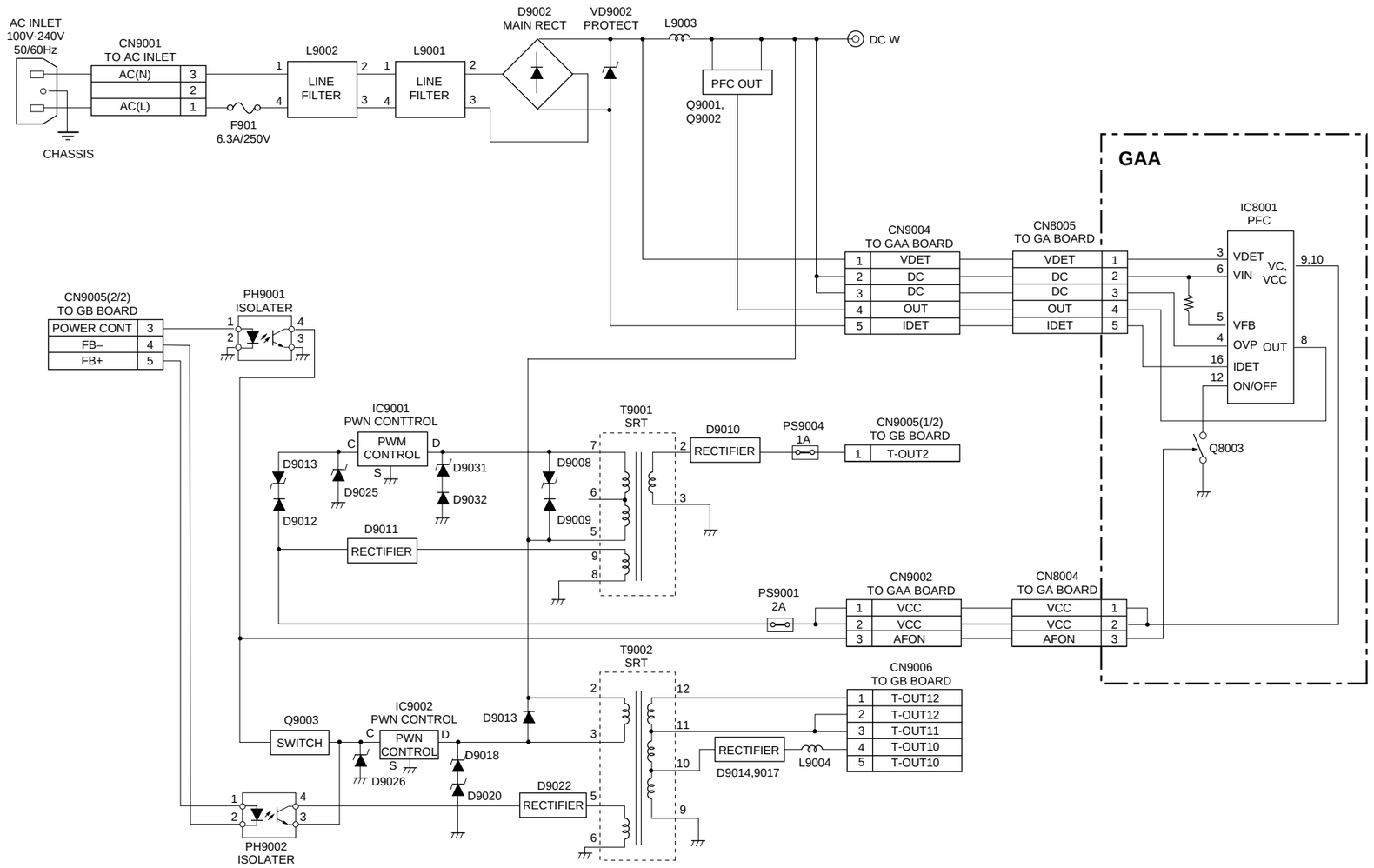


NF BLOCK

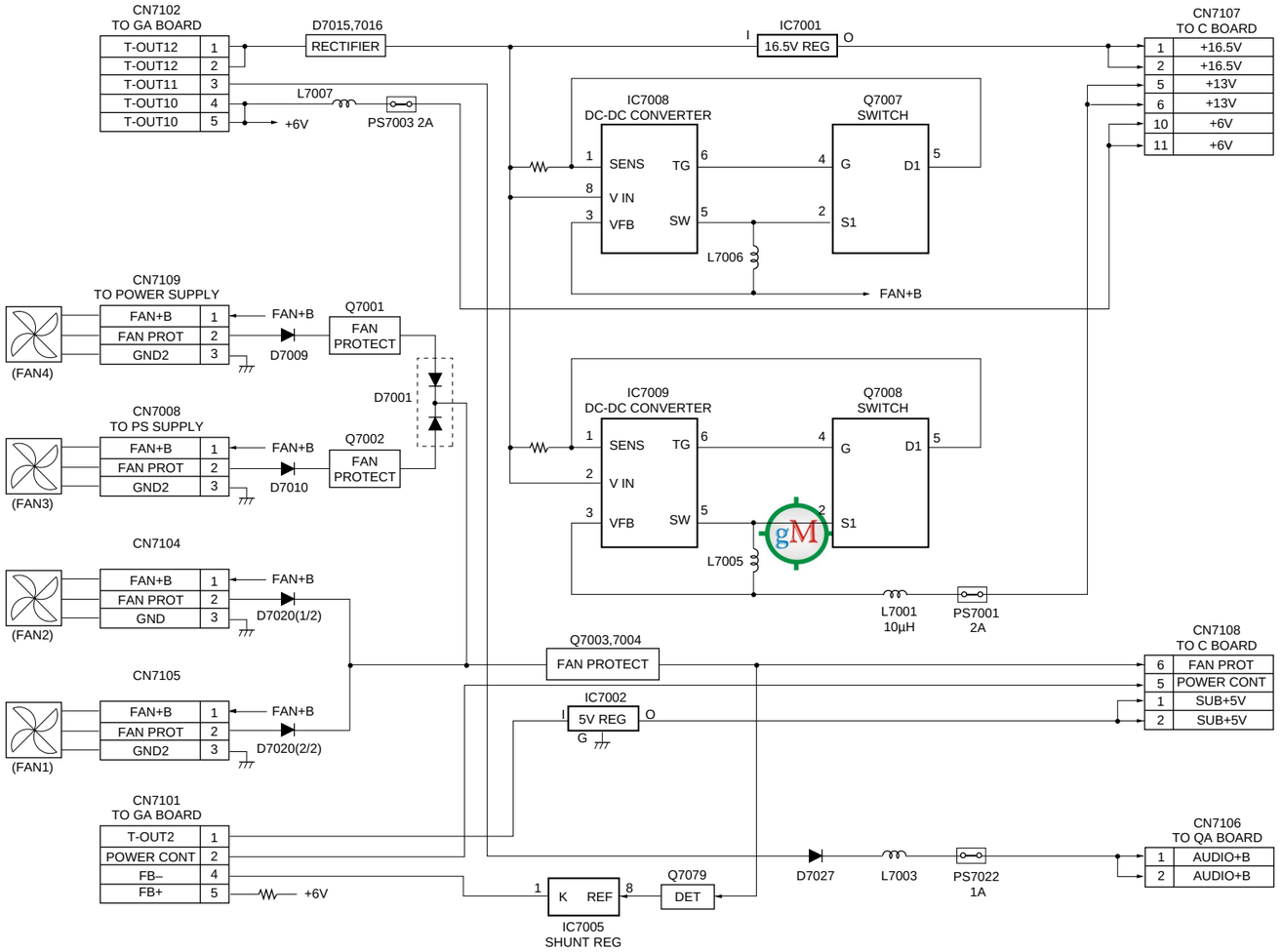


H BLOCK

C BLOCK (4/4)


AC INLET
100V-240V
50/60Hz
CHASSIS
CN9001
TO AC INLET
AC(N) 3
2
AC(L) 1
F901
6.3A/250V
L9002
LINE FILTER
L9001
LINE FILTER
D9002
MAIN RECT
VD9002
PROTECT
L9003
PFC OUT
Q9001,
Q9002
DC W
GAA
CN9004
TO GAA BOARD
1 VDET
2 DC
3 DC
4 OUT
5 IDET
CN8005
TO GA BOARD
VDET 1
DC 2
DC 3
OUT 4
IDET 5
IC8001
PFC
VDET
VIN
VC, VCC
9,10
VFB
OVP
OUT
8
IDET
ON/OFF
16
12
Q8003
CN9005(2/2)
TO GB BOARD
POWER CONT 3
FB– 4
FB+ 5
PH9001
ISOLATER
IC9001
PWN CONTTROL
PWM CONTROL
C
D
S
D9013
D9025
D9031
D9032
D9012
D9011
RECTIFIER
T9001
SRT
D9008
D9009
D9010
RECTIFIER
PS9004
1A
CN9005(1/2)
TO GB BOARD
1 T-OUT2
PS9001
2A
CN9002
TO GAA BOARD
1 VCC
2 VCC
3 AFON
CN8004
TO GA BOARD
VCC 1
VCC 2
AFON 3
T9002
SRT
Q9003
SWITCH
IC9002
PWN CONTROL
D9026
D9018
D9020
D9022
RECTIFIER
PH9002
ISOLATER
D9013
CN9006
TO GB BOARD
1 T-OUT12
2 T-OUT12
3 T-OUT11
4 T-OUT10
5 T-OUT10
RECTIFIER
D9014,9017
L9004

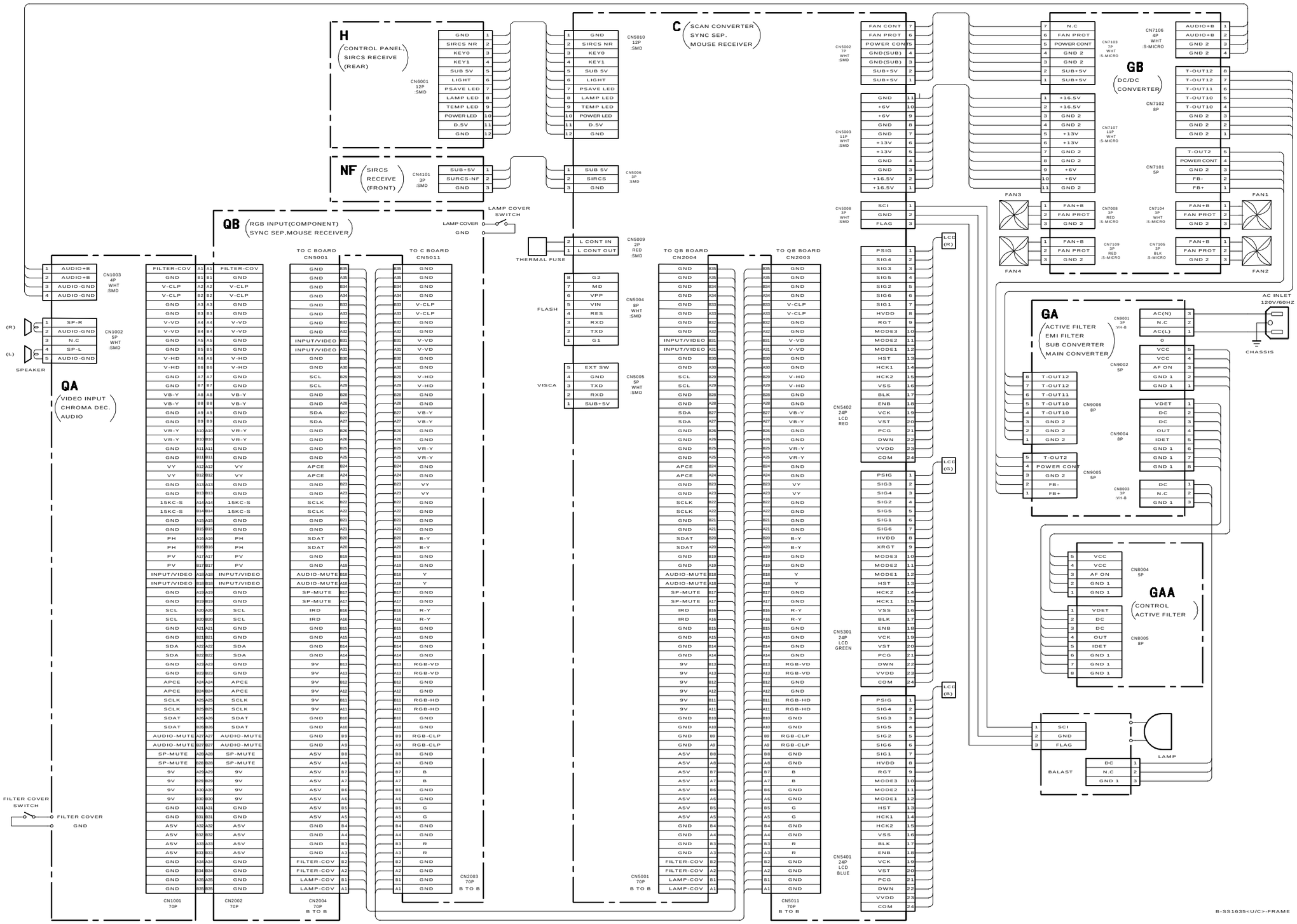
GA, GAA BLOCK


CN7102
TO GA BOARD
T-OUT12 1
T-OUT12 2
T-OUT11 3
T-OUT10 4
T-OUT10 5
D7015,7016
RECTIFIER
L7007
+6V
PS7003 2A
IC7001
16.5V REG
I
O
CN7107
TO C BOARD
1 +16.5V
2 +16.5V
5 +13V
6 +13V
10 +6V
11 +6V
IC7008
DC-DC CONVERTER
SENS
V IN
VFB
TG
SW
Q7007
SWITCH
G
D1
S1
L7006
FAN+B
CN7109
TO POWER SUPPLY
FAN+B 1
FAN PROT 2
GND2 3
(FAN4)
D7009
Q7001
FAN PROTECT
D7001
CN7008
TO PS SUPPLY
FAN+B 1
FAN PROT 2
GND2 3
(FAN3)
D7010
Q7002
FAN PROTECT
IC7009
DC-DC CONVERTER
Q7008
SWITCH
L7005
L7001
10µH
PS7001
2A
CN7104
FAN+B 1
FAN PROT 2
GND 3
(FAN2)
D7020(1/2)
CN7105
FAN+B 1
FAN PROT 2
GND2 3
(FAN1)
D7020(2/2)
Q7003,7004
FAN PROTECT
IC7002
5V REG
G
CN7108
TO C BOARD
6 FAN PROT
5 POWER CONT
1 SUB+5V
2 SUB+5V
CN7101
TO GA BOARD
T-OUT2 1
POWER CONT 2
FB– 4
FB+ 5
+6V
K REF
IC7005
SHUNT REG
Q7079
DET
D7027
L7003
PS7022
1A
CN7106
TO QA BOARD
1 AUDIO+B
2 AUDIO+B

GB BLOCK

SECTION 8
DIAGRAMS

8-1. FRAME SCHEMATIC DIAGRAM



8-1 8-1

A B C D E F G H

8-2. SCHEMATIC DIAGRAMS/PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted.
  50WV or less are not indicated except for electrolytics.
  pF: μμF
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W

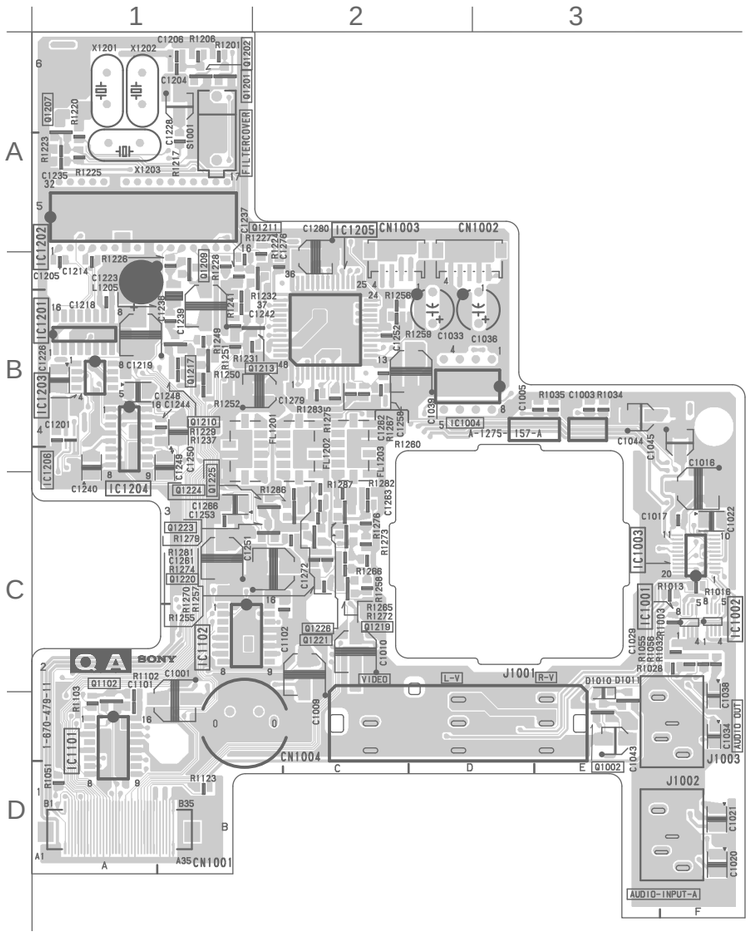
- Chip resister are 1/10W unless otherwise noted.
- All resistors are in ohms. (MΩ = 1000KΩ, KΩ = 1000Ω)
- : nonfiammable resistor.
- : fusible resistor.
- △ : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- METAL FILM (: RN) resister in 0.5% or 1%, 1/4W unless otherwise specified.
- All voltages are in V.
- Voltage variations may be noted due to normal production tolerance.
- Reading are taken with Composite Video signal input from color-bar pattern generator.
- Voltage are dc with respect to ground unless otherwise noted.
- : B+/B– line.
- : signal path.
- Circled numbers are waveforms reference.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

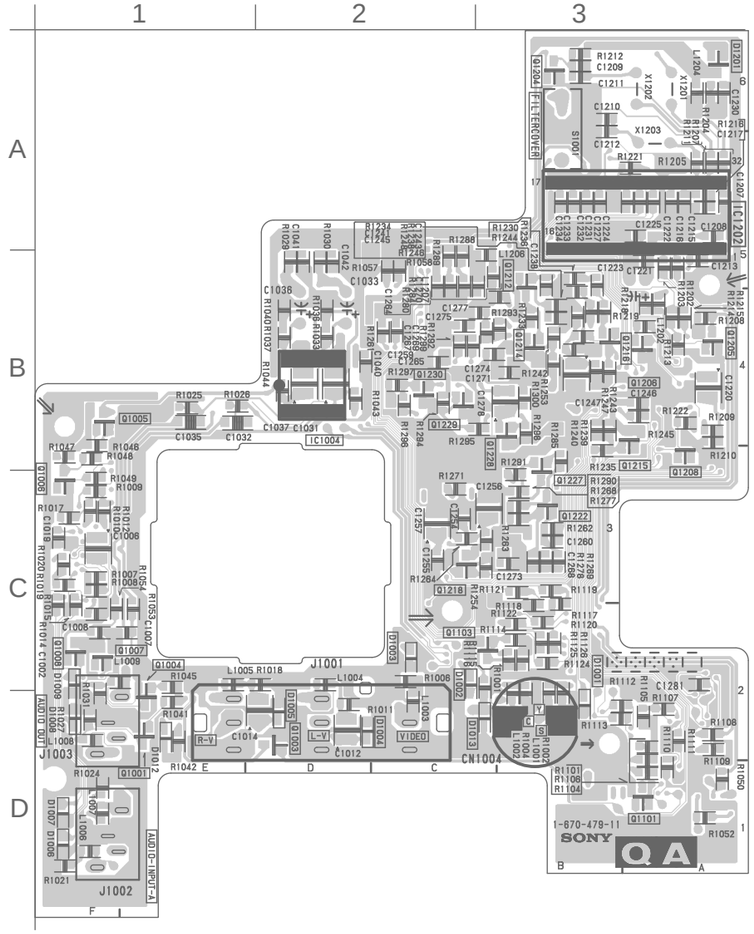
The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.



QA –A SIDE–

SUFFIX : -11



QA –B SIDE–

SUFFIX : -11

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QA
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1-670-479-11
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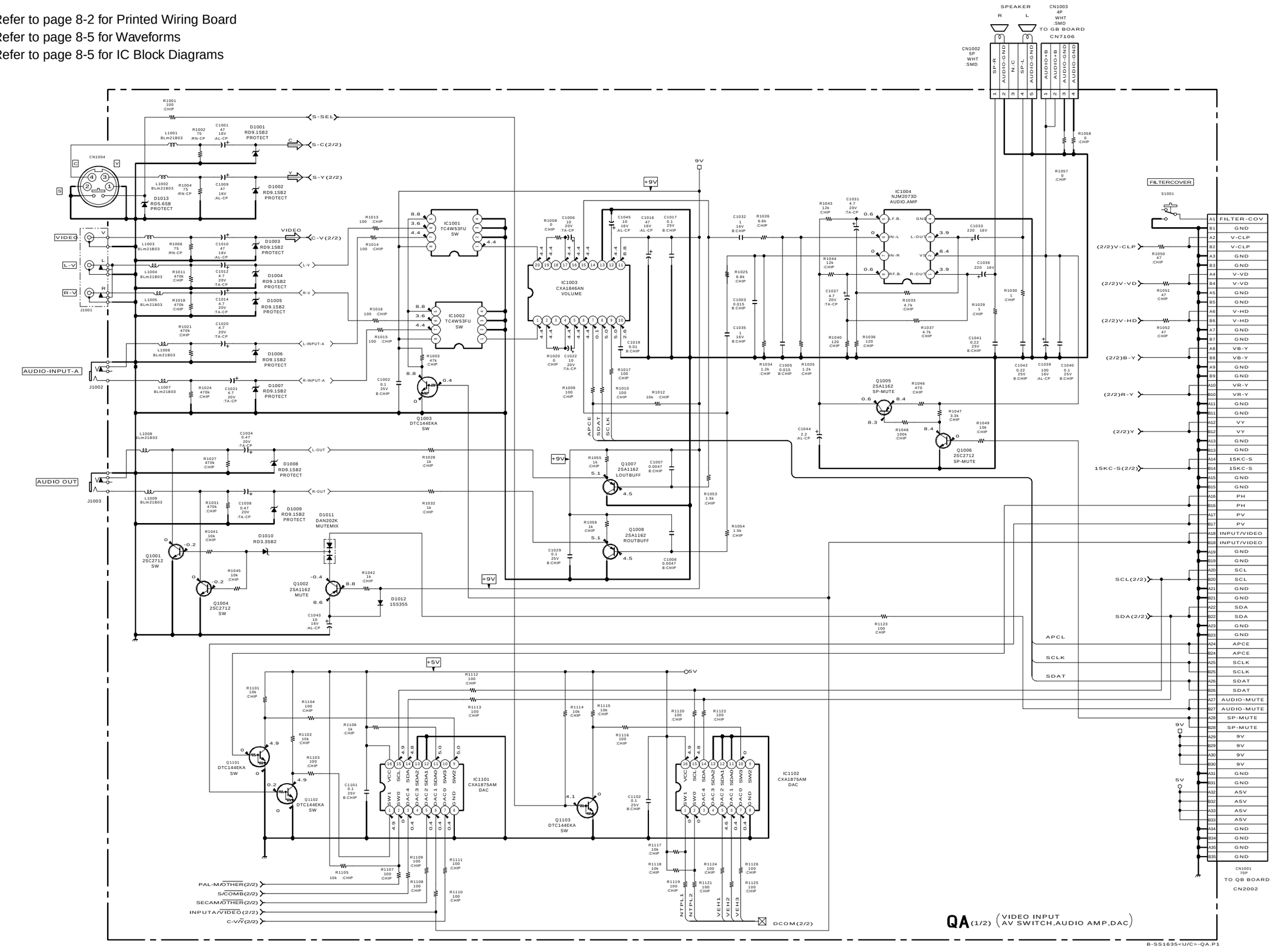
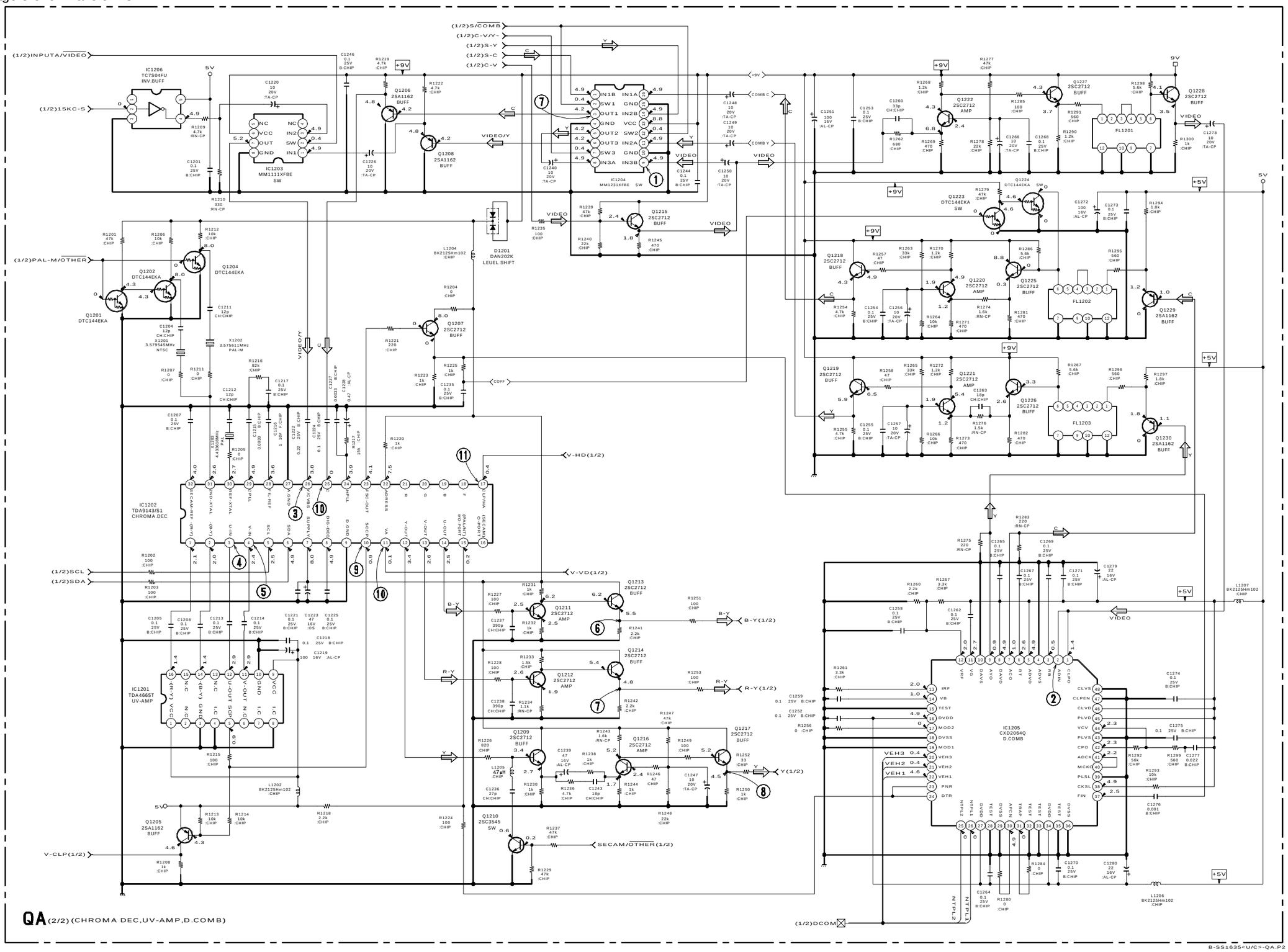
D1001	*C-3	IC1203	B-1	Q1209	B-1
D1002	*C-2	IC1204	B-1	Q1210	B-1
D1003	*C-2	IC1205	B-2	Q1211	B-2
D1004	*D-2	IC1206	B-1	Q1212	*B-3
D1005	*D-2			Q1213	B-1
D1006	*D-1	Q1001	*D-1	Q1214	*B-3
D1007	*D-1	Q1002	D-3	Q1215	*B-3
D1008	*D-1	Q1003	*D-2	Q1216	*B-3
D1009	*C-1	Q1004	*C-1	Q1217	B-1
D1010	C-3	Q1005	*B-1	Q1218	*C-2
D1011	C-3	Q1006	*C-1	Q1219	C-2
D1012	*D-1	Q1007	*C-1	Q1220	C-1
D1013	*D-3	Q1008	*C-1	Q1221	C-2
D1201	*A-3	Q1101	*D-3	Q1222	*C-3
		Q1102	D-1	Q1223	C-1
IC1001	C-3	Q1103	*C-3	Q1224	C-1
IC1002	C-3	Q1201	A-1	Q1225	B-1
IC1003	C-3	Q1202	A-1	Q1226	C-2
IC1004	B-2	Q1204	*A-3	Q1227	*B-3
IC1101	D-1	Q1205	*B-3	Q1228	*B-3
IC1102	C-1	Q1206	*B-3	Q1229	*B-2
IC1201	B-1	Q1207	A-1	Q1230	*B-2
IC1202	A-1	Q1208	*B-3		

*:B Side mount

- Refer to page 8-2 for Printed Wiring Board
- Refer to page 8-5 for Waveforms
- Refer to page 8-5 for IC Block Diagrams



- Refer to page 8-2 for Printed Wiring Board
- Refer to page 8-5 for IC Block Diagrams
- Refer to page 8-5 for Waveforms



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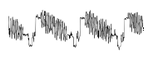
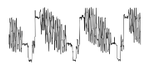
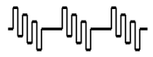
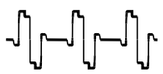
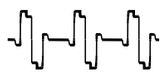
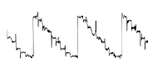
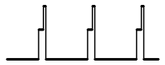
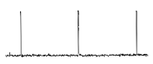
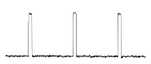
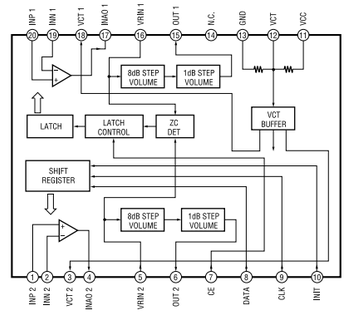
QA Board Waveforms

①  1.0Vp-p (H)	②  1.5Vp-p (H)	③ 1.0Vp-p (H)	④  1.5Vp-p (H)
⑤  1.1Vp-p (H)	⑥ 1.2Vp-p (H)	⑦  950mVp-p (H)	⑧  1.5Vp-p (H)
⑨  4.0Vp-p (H)	⑩  5.0Vp-p (H)	⑪  5.0Vp-p (H)	

QA Board IC Block Diagrams

CXA1846AN



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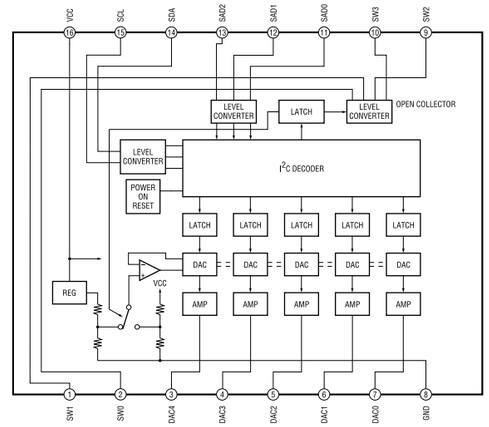

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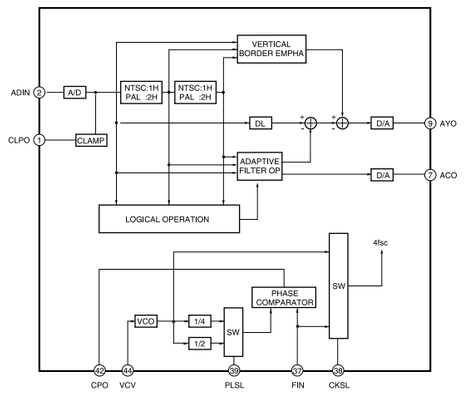

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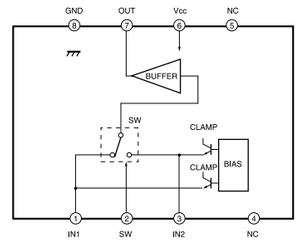

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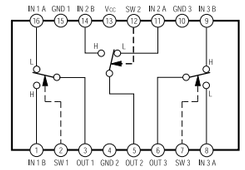

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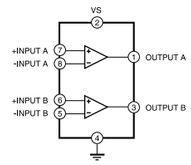

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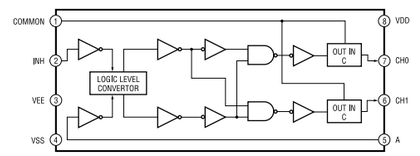

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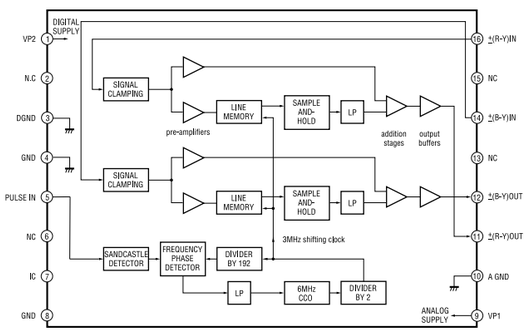

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QB
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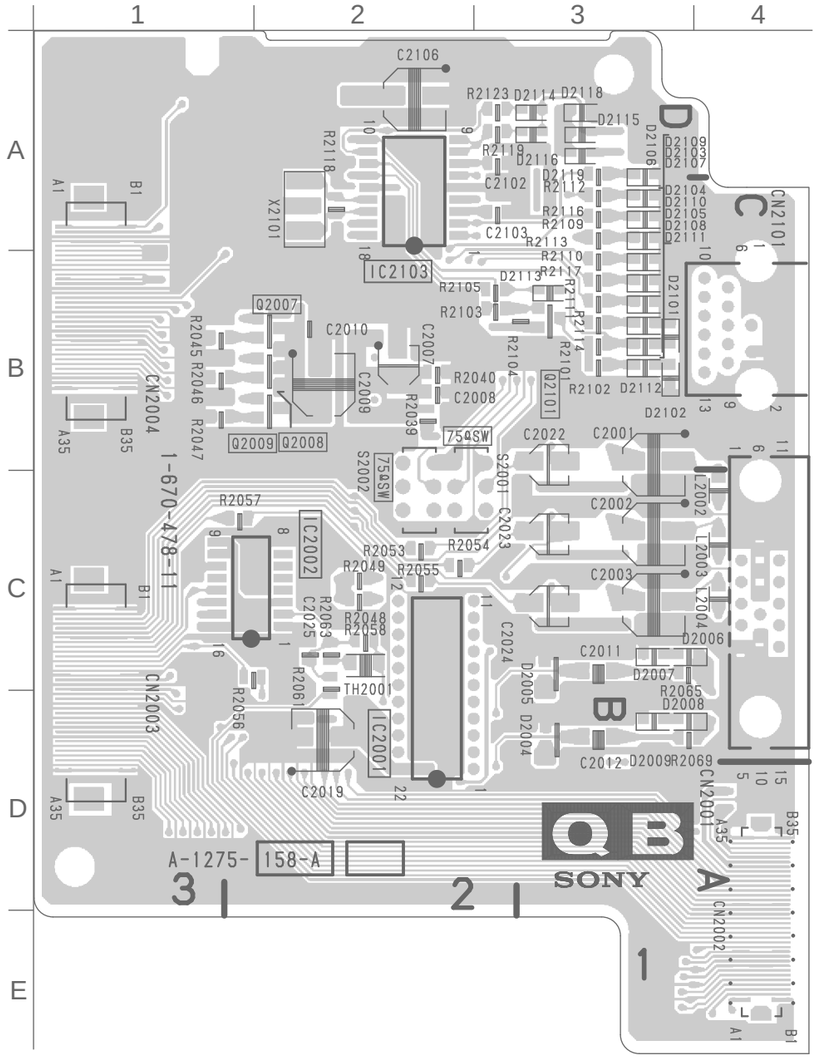
1-670-478-11

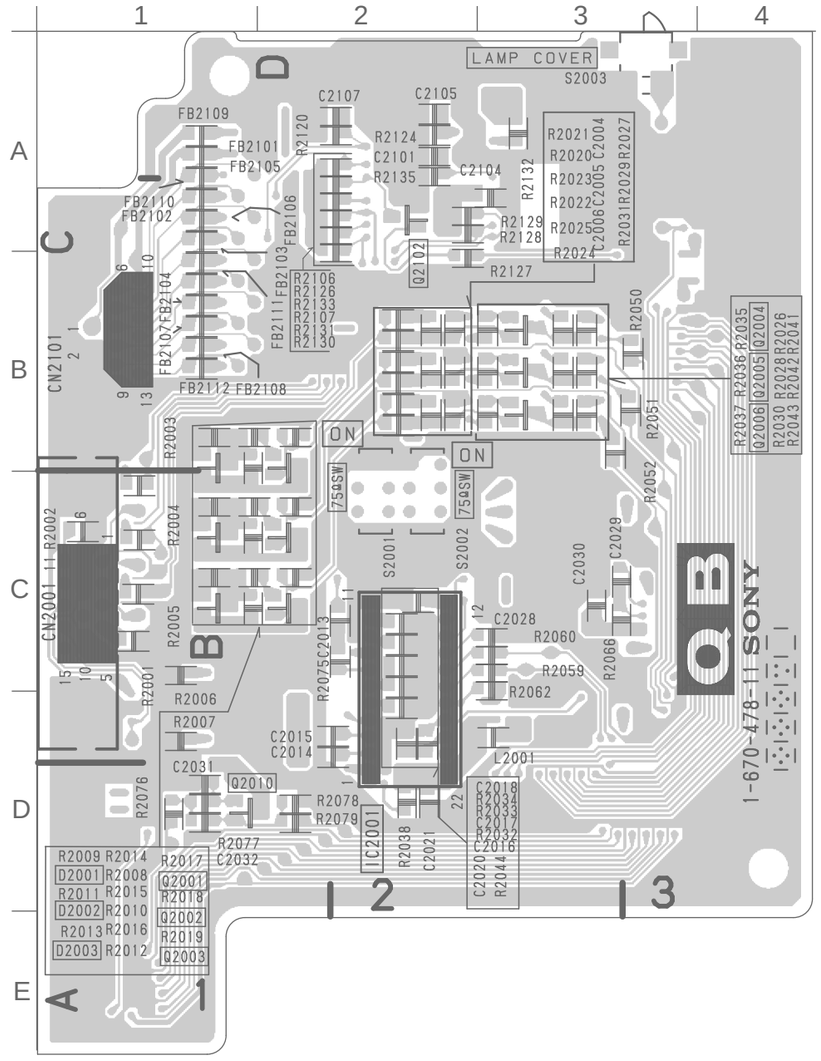
D2001	*B-1
D2002	*C-1
D2003	*C-1
D2004	D-3
D2005	C-3
D2006	C-3
D2007	C-3
D2008	D-3
D2009	D-3
D2101	B-3
D2102	B-3
D2103	A-3
D2104	A-3
D2105	A-3
D2106	A-3
D2107	A-3
D2108	A-3
D2109	A-3
D2110	A-3
D2111	A-3
D2112	B-3
D2113	B-3
D2114	A-3
D2115	A-3
D2116	A-3
D2118	A-3
D2119	A-3
IC2001	D-2
IC2002	C-2
IC2103	B-2
Q2001	*B-2
Q2002	*C-2
Q2003	*C-2
Q2004	*B-3
Q2005	*B-3
Q2006	*B-3
Q2007	B-2
Q2008	B-2
Q2009	B-2
Q2101	B-3
Q2102	*A-2

*:B Side mount



QB –A SIDE–

SUFFIX : -11

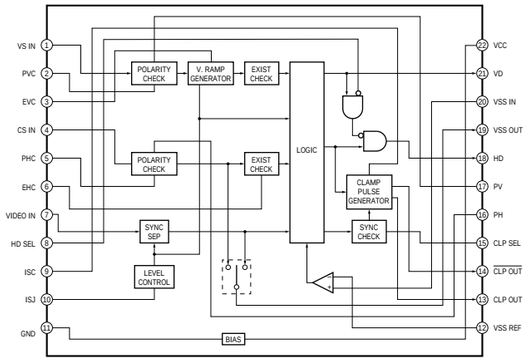


QB –B SIDE–

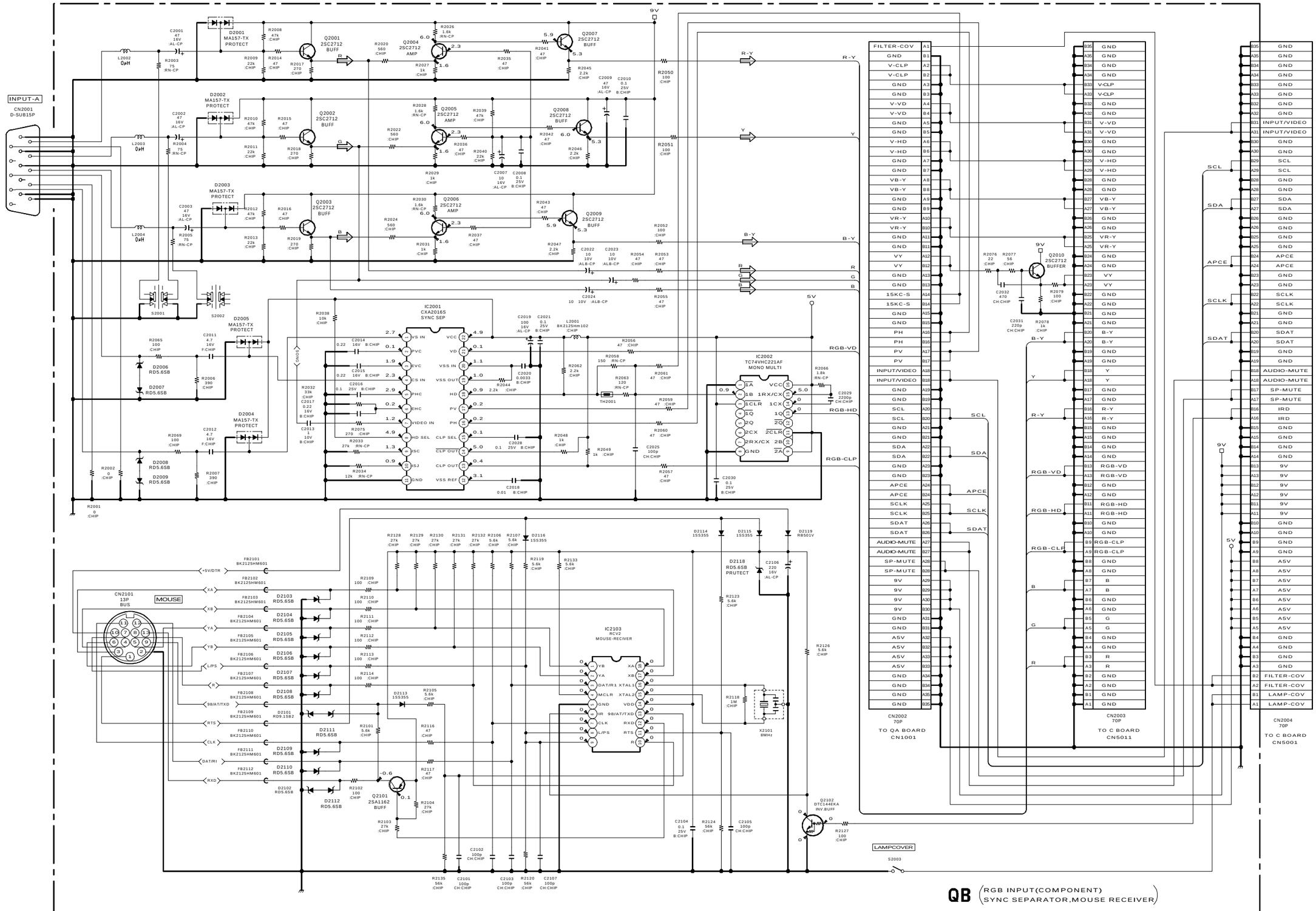
SUFFIX : -11

QB Board IC Block Diagram

CXA2016S



- Refer to page 8-6 for Printed Wiring Board
- Refer to page 8-6 for IC Block Diagrams



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C
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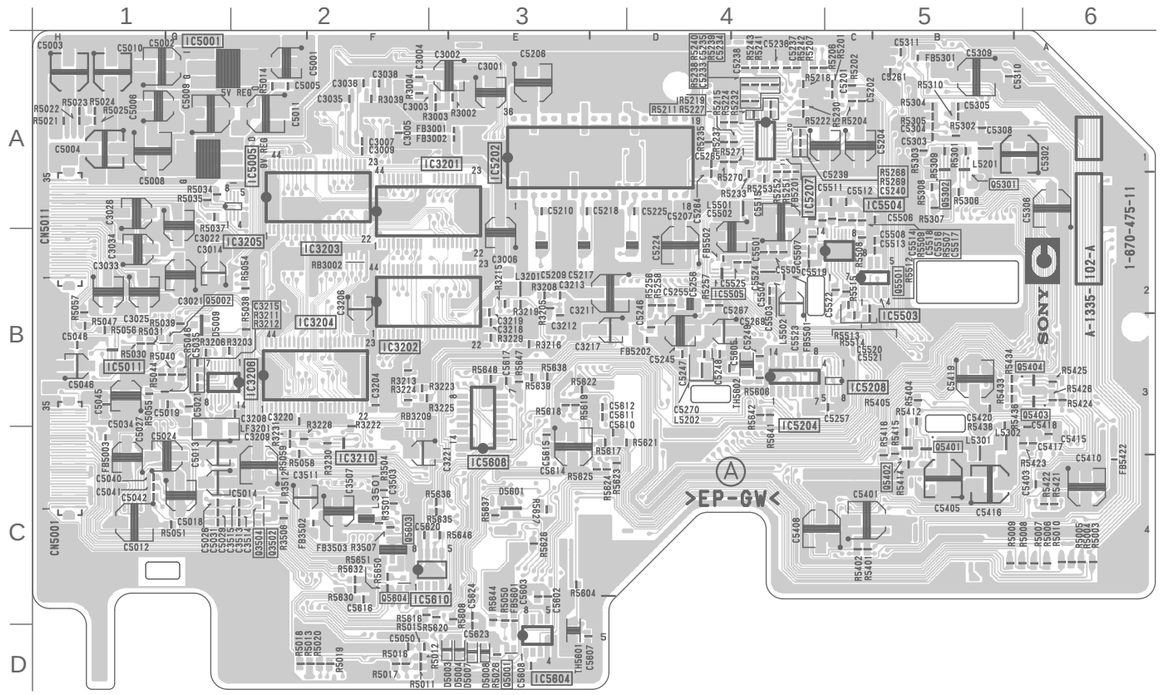
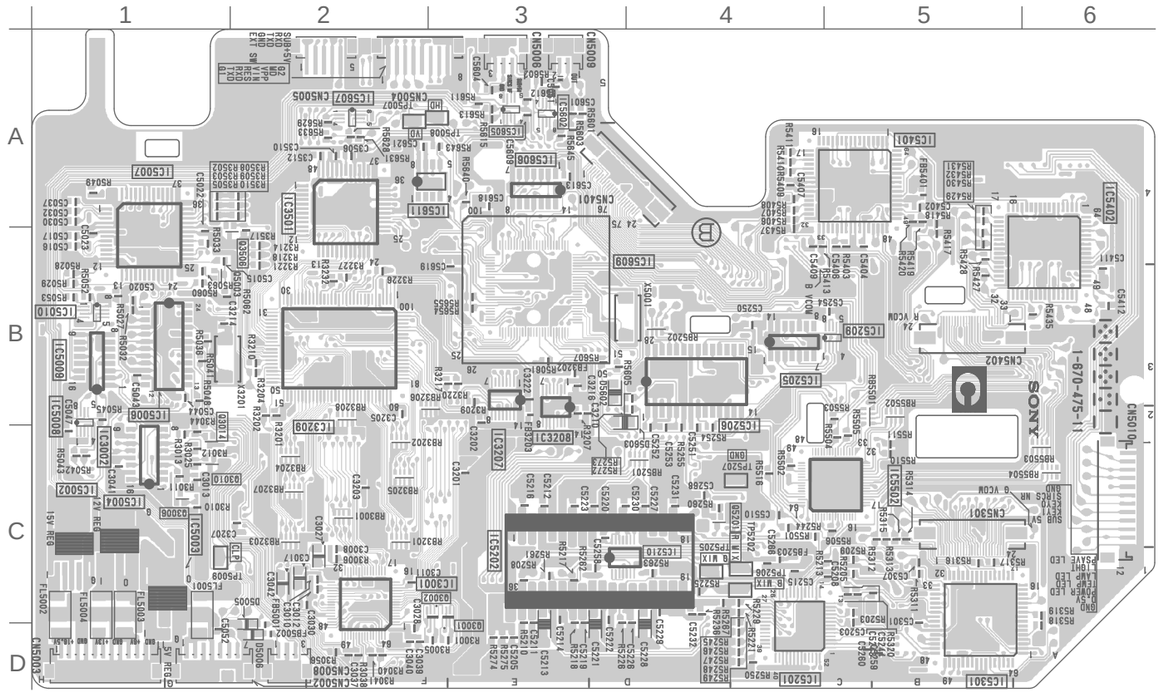
1-670-475-11

D5003	D-3	Q3001	*D-3
D5004	D-3	Q3002	*C-3
D5005	*C-2	Q3006	*C-1
D5006	*D-2	Q3010	*C-1
D5007	D-3	Q3014	*C-1
D5008	D-3	Q3502	C-2
D5009	B-1	Q3504	C-2
D5602	*B-3	Q3506	*B-2
D5603	*B-3	Q5001	D-3
		Q5002	B-1
IC3001	*C-2	Q5003	*B-1
IC3002	*C-1	Q5006	*B-2
IC3201	A-3	Q5201	*C-4
IC3202	B-2	Q5301	A-5
IC3203	A-2	Q5302	A-5
IC3204	B-2	Q5401	C-5
IC3205	A-1	Q5402	C-5
IC3206	B-1	Q5403	B-6
IC3207	*B-3	Q5404	B-6
IC3208	*B-3	Q5501	B-5
IC3209	*B-2	Q5603	C-2
IC3210	C-2	Q5604	C-2
IC3501	*A-2		
IC5001	A-1	RB3002	B-2
IC5002	*C-1		
IC5003	*C-3	TP5007	*A-2
IC5004	*C-1	TP5008	*A-3
IC5005	A-1	TP5009	*C-1
IC5006	*C-1	TP5202	*C-4
IC5007	*B-1	TP5205	*C-4
IC5008	*B-1	TP5206	*C-4
IC5009	*B-1	TP5207	*C-4
IC5010	*B-1		
IC5011	B-1	*:B Side mount	
IC5201	*D-4		
IC5202	A-3		
IC5204	B-4		
IC5205	*B-4		
IC5206	*B-4		
IC5207	A-4		
IC5208	B-5		
IC5209	*B-5		
IC5210	*D-4		
IC5301	*D-5		
IC5401	*A-5		
IC5402	*A-6		
IC5502	*C-5		
IC5503	B-5		
IC5504	B-5		
IC5505	B-4		
IC5602	*A-3		
IC5605	*A-3		
IC5606	*A-3		
IC5607	*A-2		
IC5609	*B-3		
IC5610	*A-2		
IC5611	*A-3		
LF3201	C-2		



C –A SIDE–

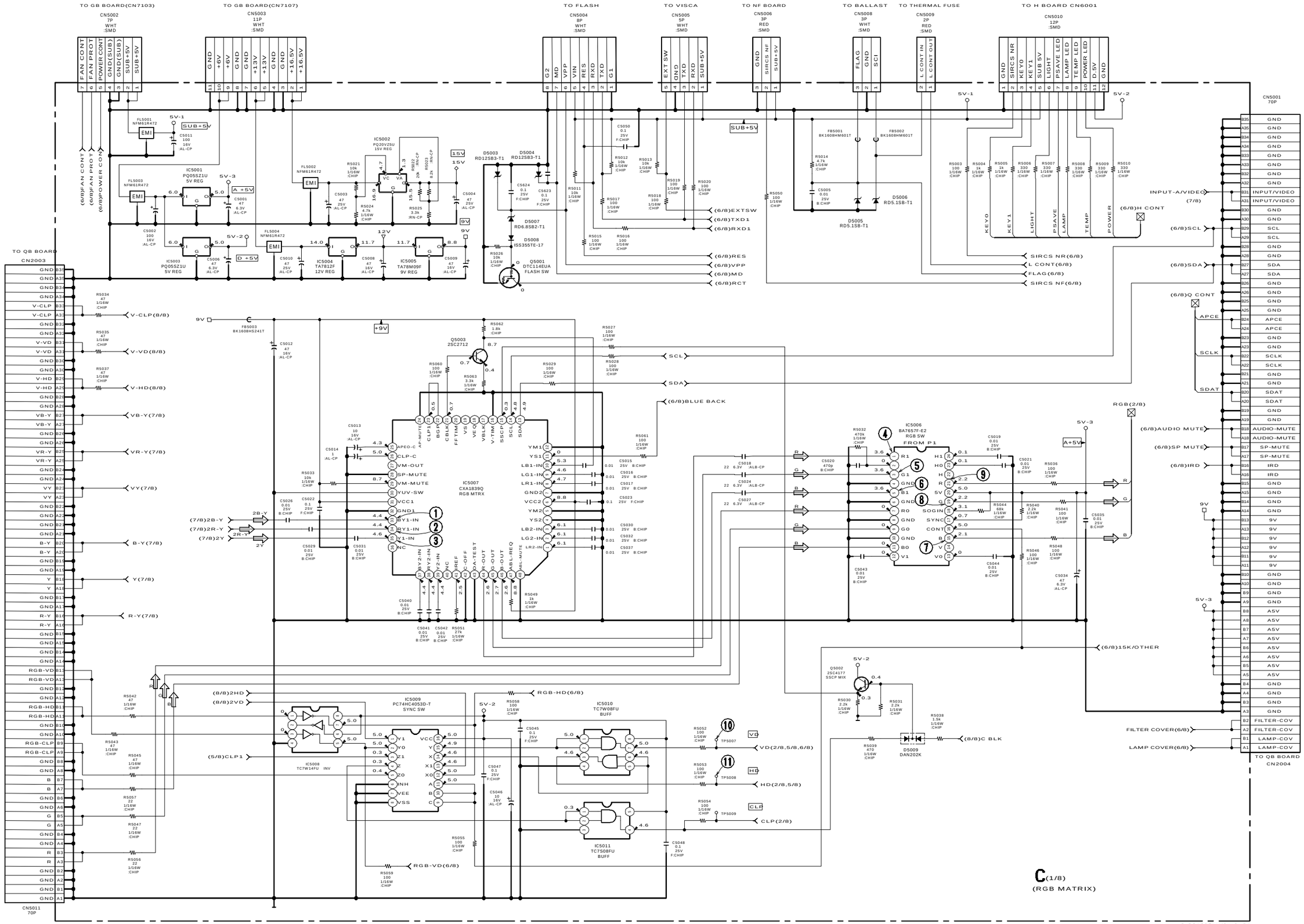
SUFFIX : -11



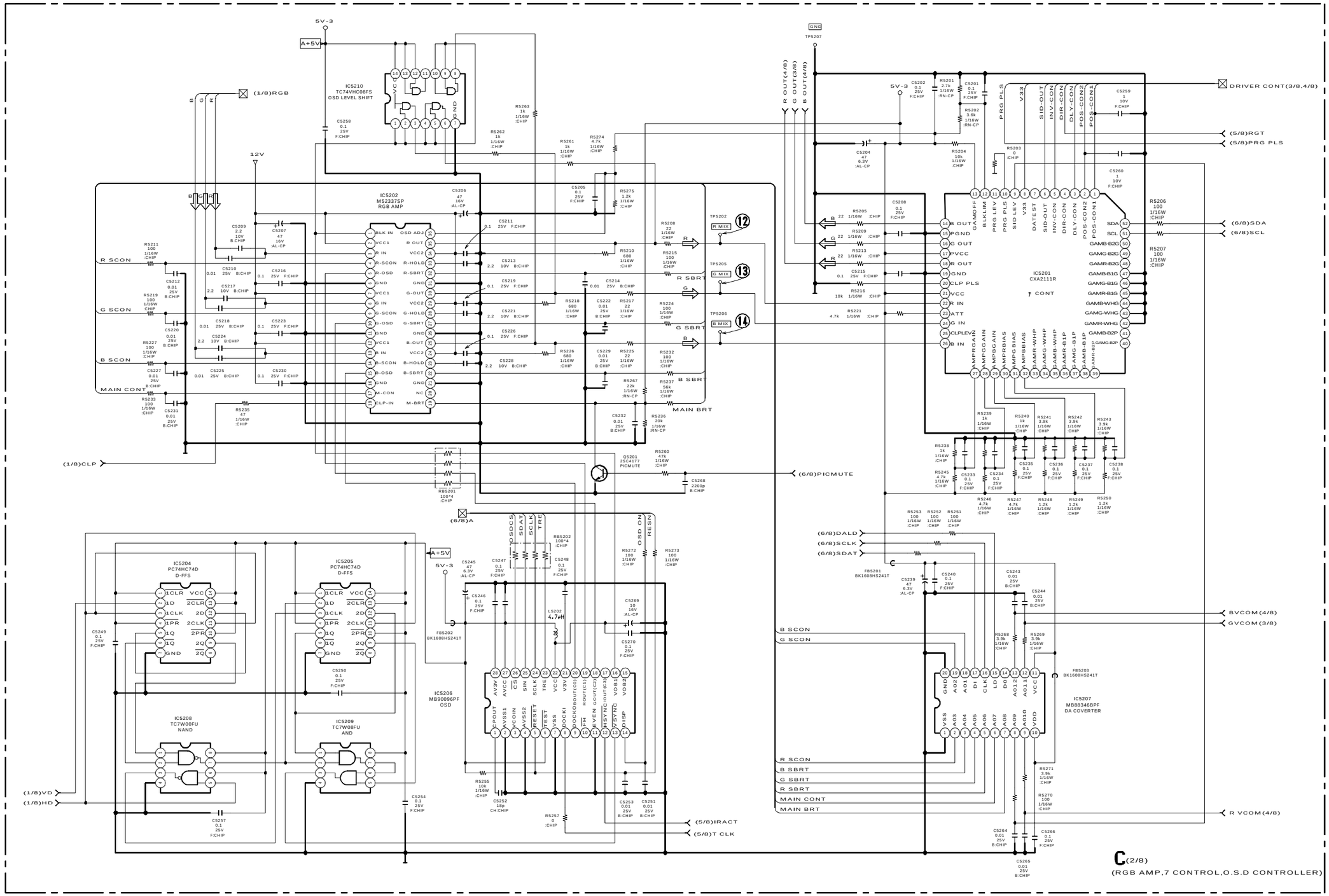
C –B SIDE–

SUFFIX : -11

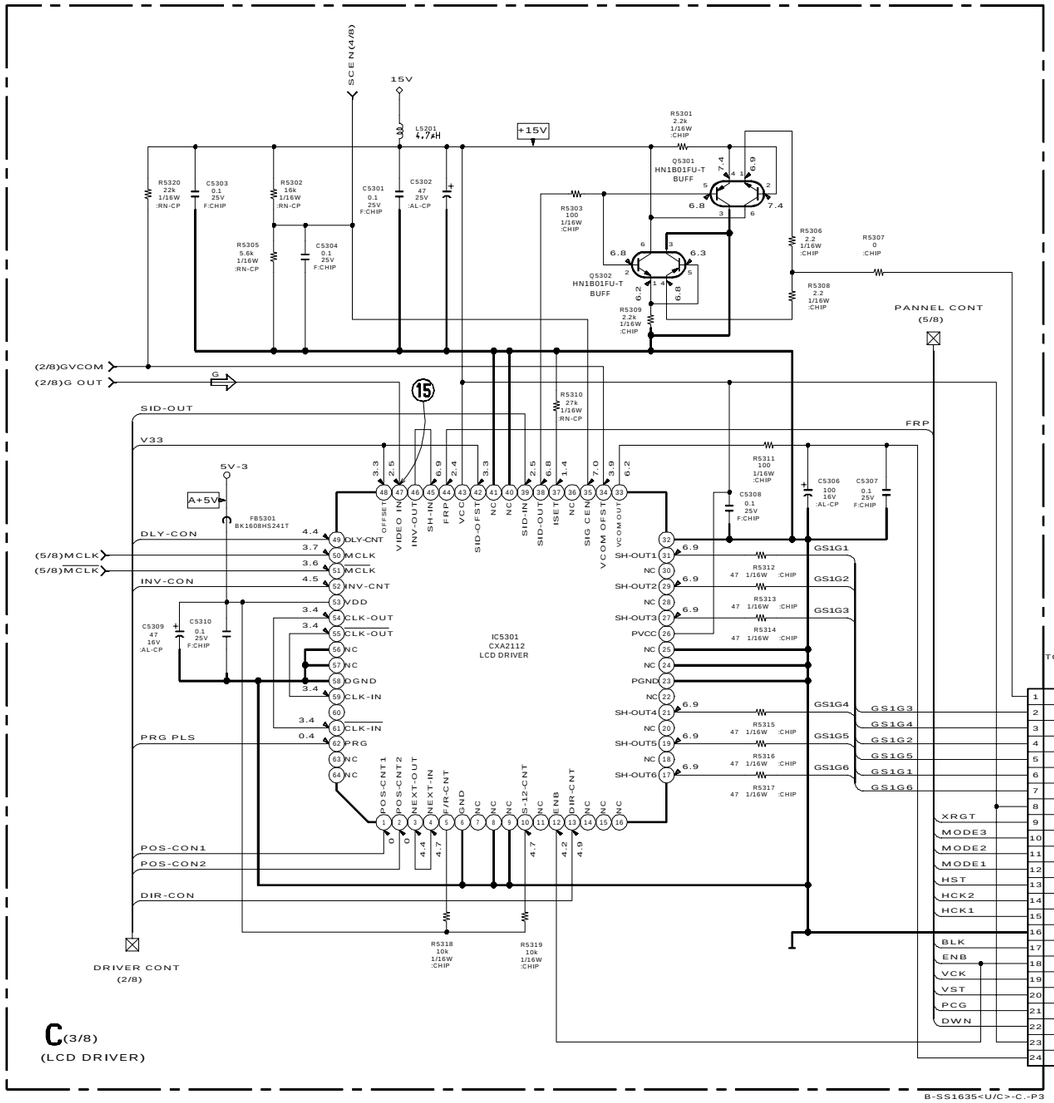
- Refer to page 8-8 for Printed Wiring Board
- Refer to page 8-17 for Waveforms
- Refer to page 8-18 for IC Block Diagrams



- Refer to page 8-8 for Printed Wiring Board
- Refer to page 8-17 for Waveforms
- Refer to page 8-18 for IC Block Diagrams

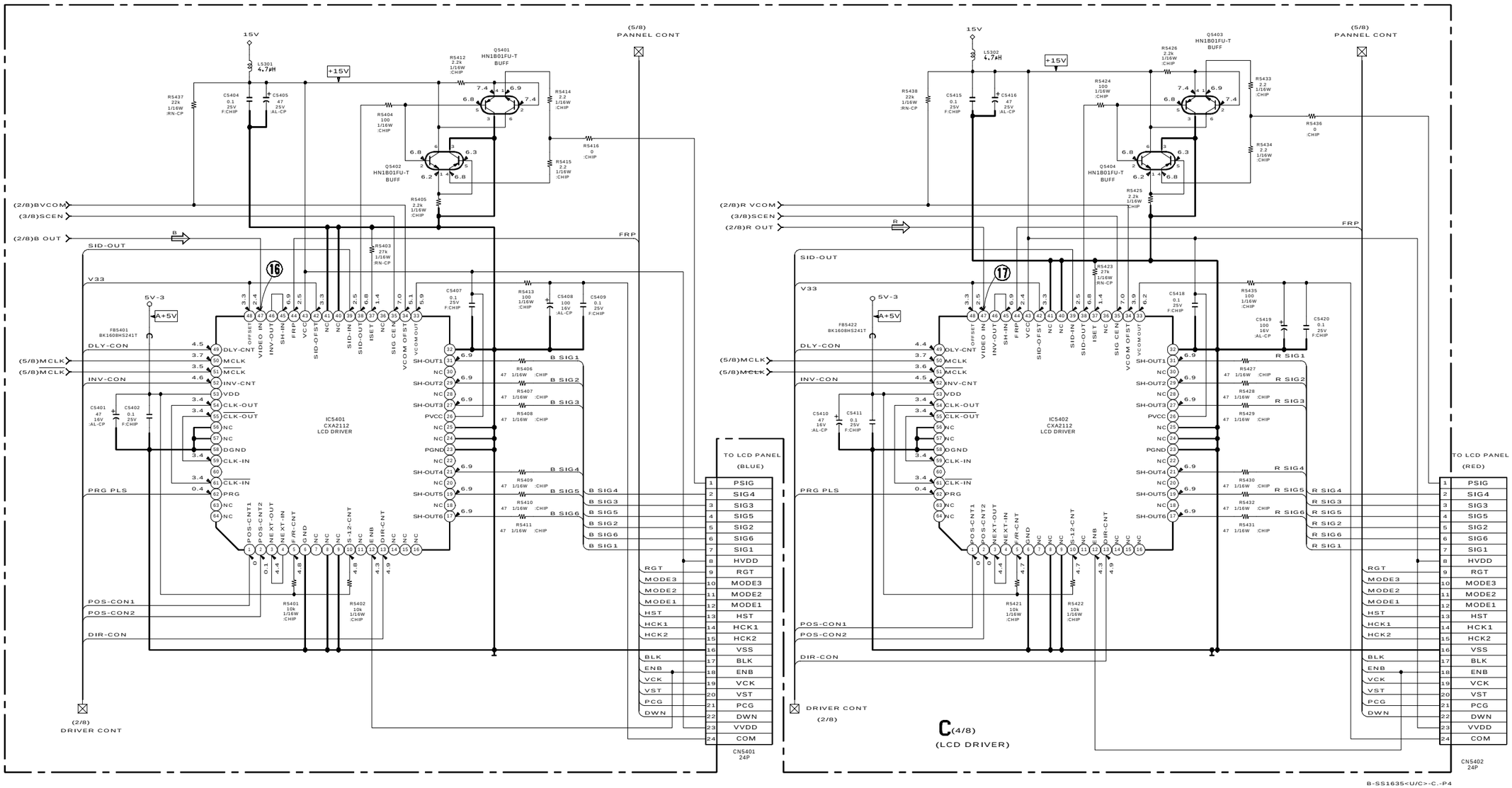


- Refer to page 8-8 for Printed Wiring Board
- Refer to page 8-17 for Waveforms
- Refer to page 8-18 for IC Block Diagrams

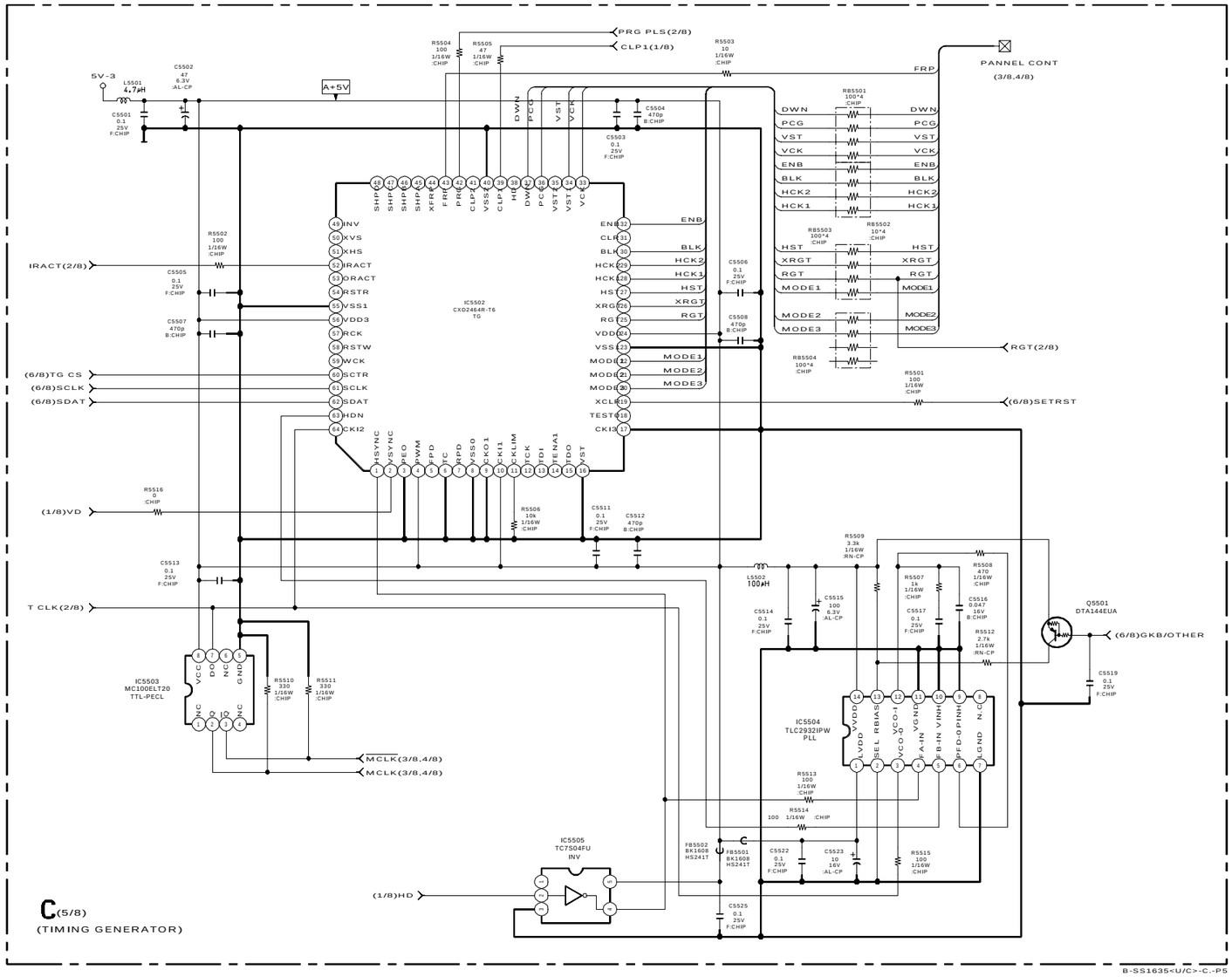


A B C D E F G H

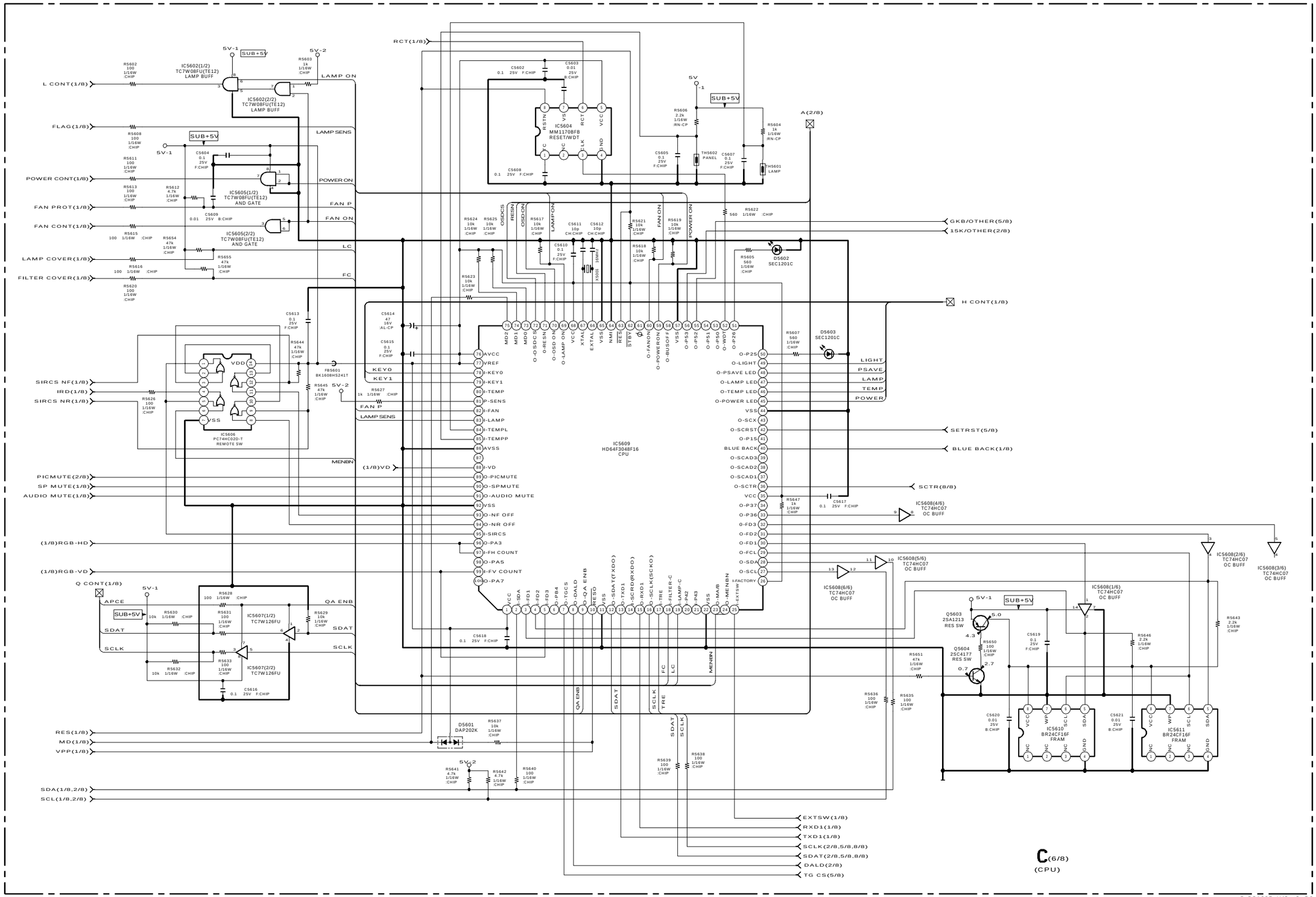
- Refer to page 8-8 for Printed Wiring Board
- Refer to page 8-17 for Waveforms
- Refer to page 8-18 for IC Block Diagrams



- Refer to page 8-8 for Printed Wiring Board
- Refer to page 8-18 for IC Block Diagrams



• Refer to page 8-8 for Printed Wiring Board



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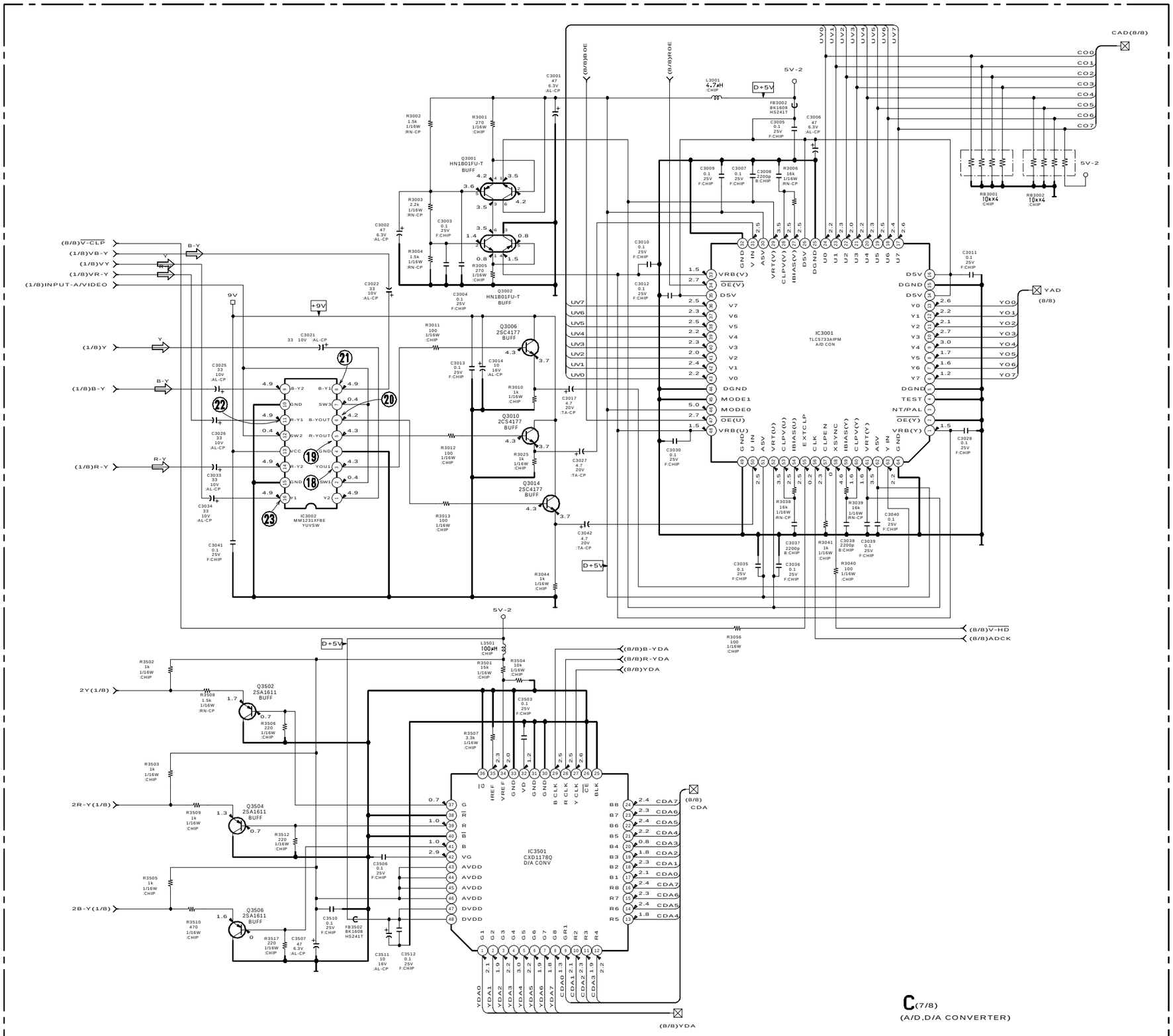
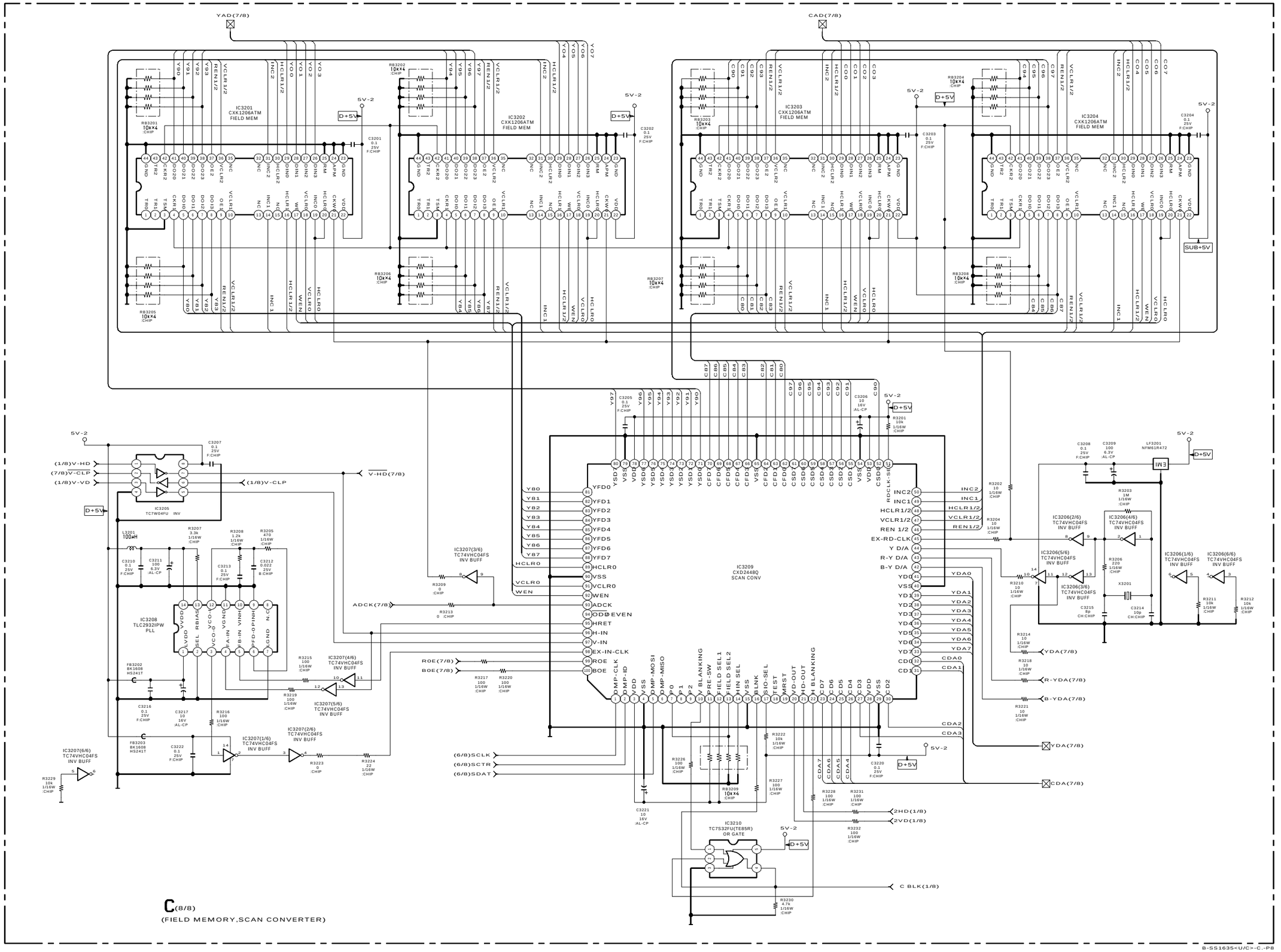
- Refer to page 8-8 for Printed Wiring Board
- Refer to page 8-17 for Waveforms
- Refer to page 8-18 for IC Block Diagrams

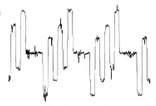
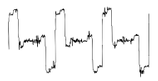
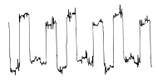
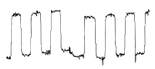
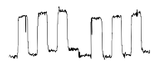
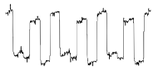
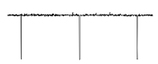
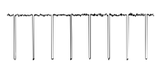
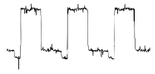
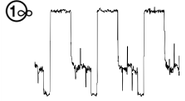
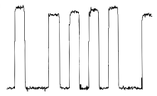
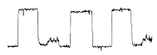
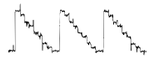
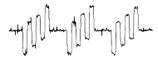
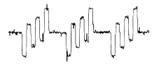
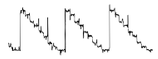


• Refer to page 8-8 for Printed Wiring Board • Refer to page 8-18 for IC Block Diagrams



C(8/8)
(FIELD MEMORY,SCAN CONVERTER)

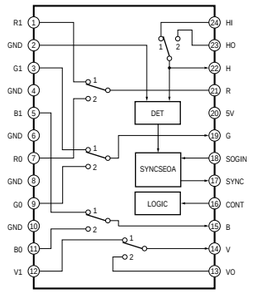
C Board Waveforms

①  1.0Vp-p (H)	②  0.8Vp-p (H)	③ 0.6Vp-p (H)	④  0.7Vp-p (H)
⑤ 0.4Vp-p (H)	⑥  0.5Vp-p (H)	⑦  0.5Vp-p (H)	⑧ 0.4Vp-p (H)
⑨  0.6Vp-p (H)	⑩  5.0Vp-p (V)	⑪  5.0Vp-p (H)	⑫ 0.8Vp-p (H)
⑬  0.6Vp-p (H)	⑭ 0.7Vp-p (H)	⑮  1.0Vp-p (H)	⑯  1.0Vp-p (H)
⑰  1.0Vp-p (H)	⑱  1.5Vp-p (H)	⑲ 0.5Vp-p (H)	⑳  1.5Vp-p (H)
㉑  1.5Vp-p (H)	㉒ 1.5Vp-p (H)	㉓  1.25Vp-p (H)	

8-17

C Board IC Block Diagrams

BA7657F



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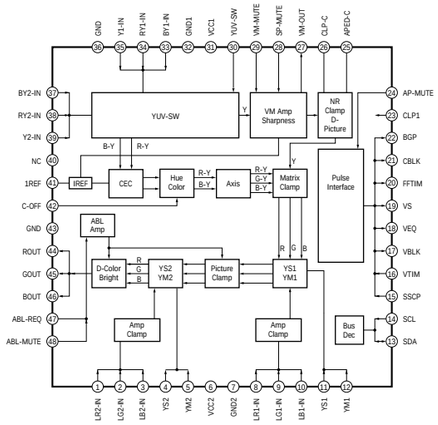

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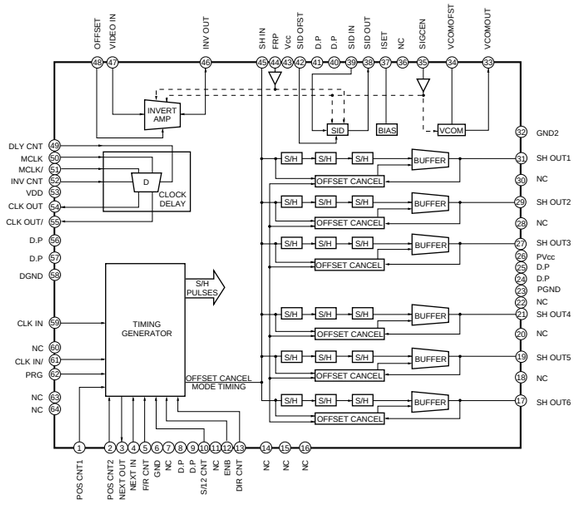

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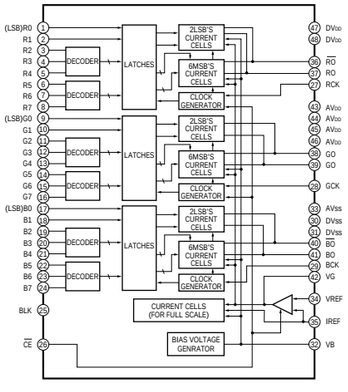

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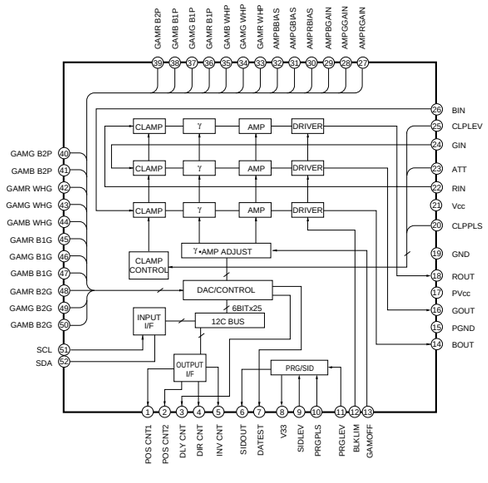

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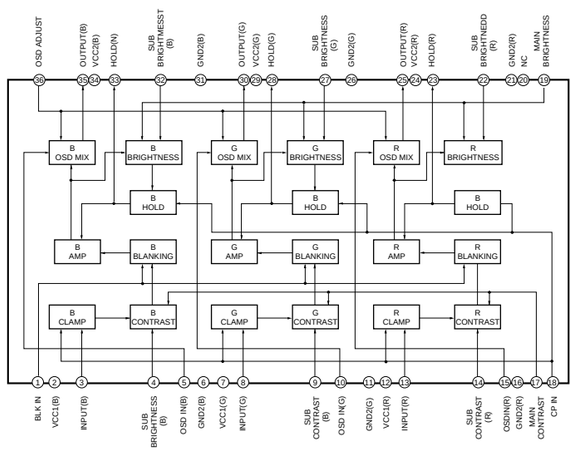

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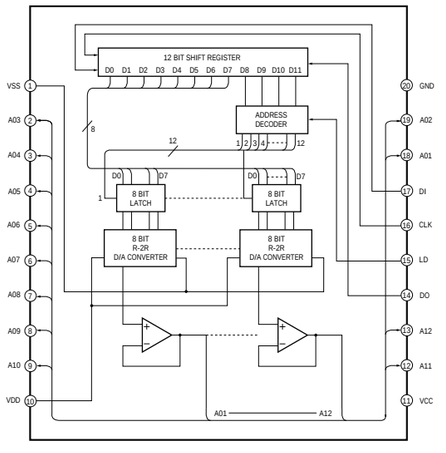

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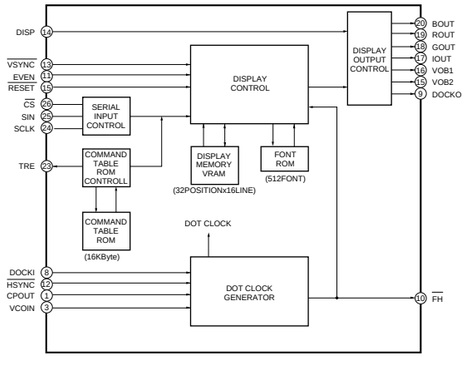

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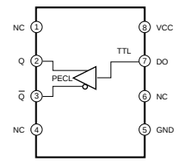

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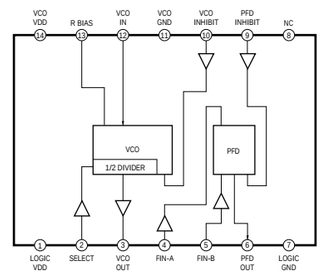

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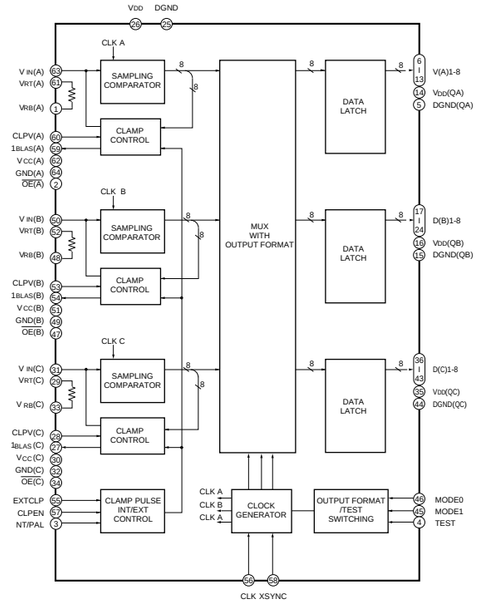
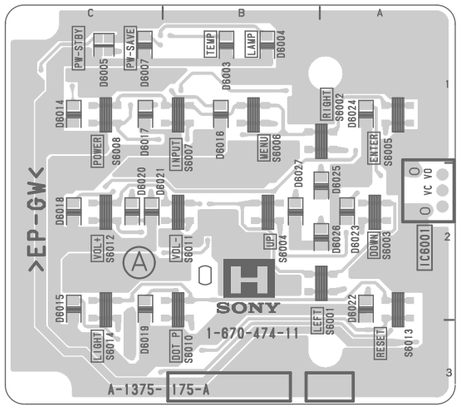
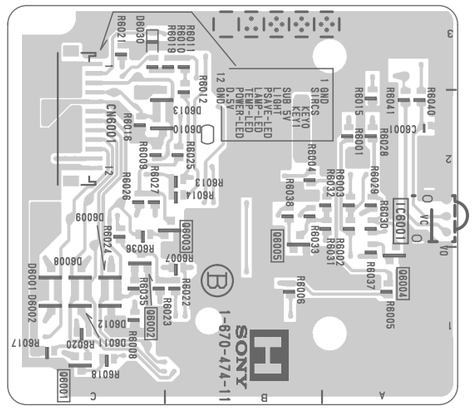


8-18



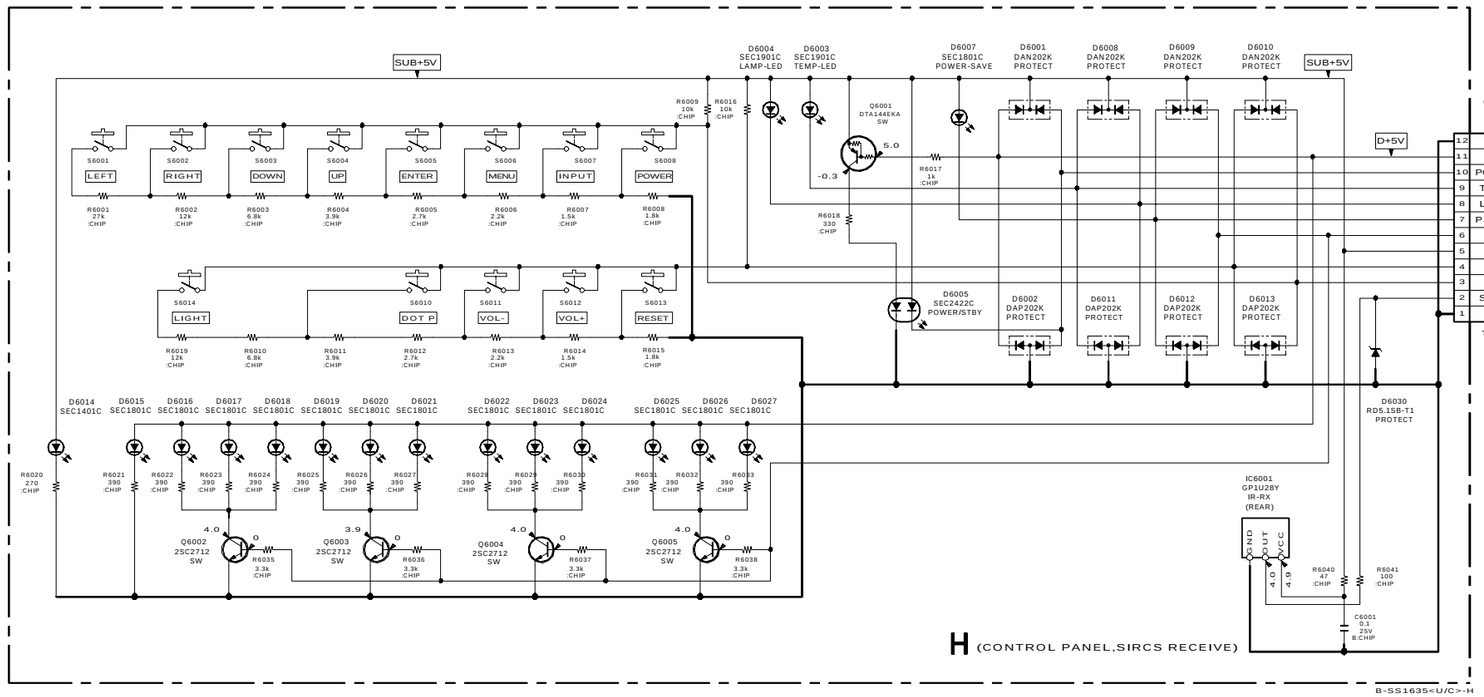
H –A SIDE–

SUFFIX : -11

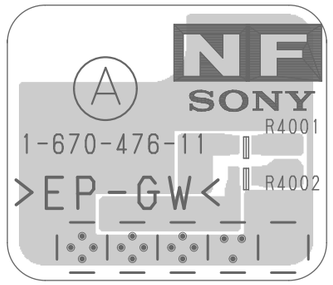


H –B SIDE–

SUFFIX : -11

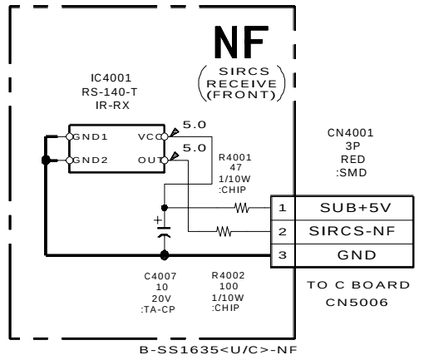


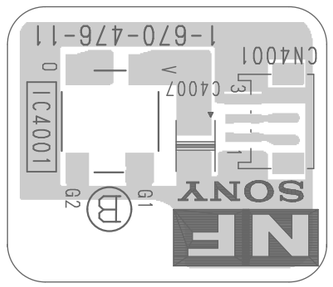
8-19



NF –A SIDE–

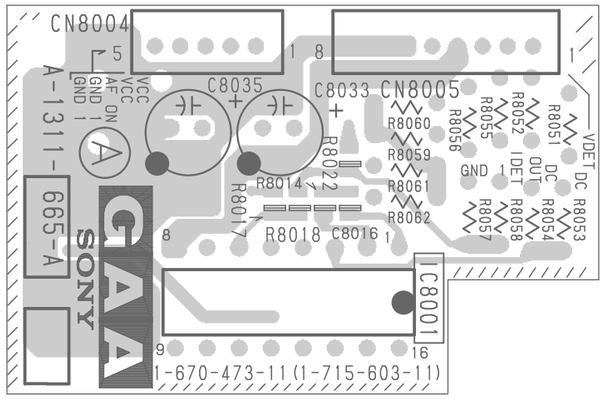
SUFFIX : -11





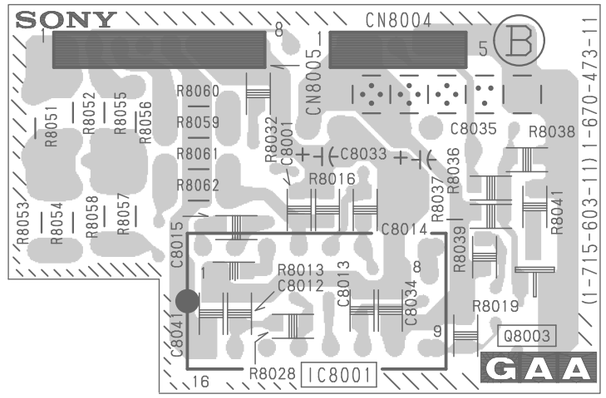
NF –B SIDE–

SUFFIX : -11



GAA –A SIDE–

SUFFIX : -11

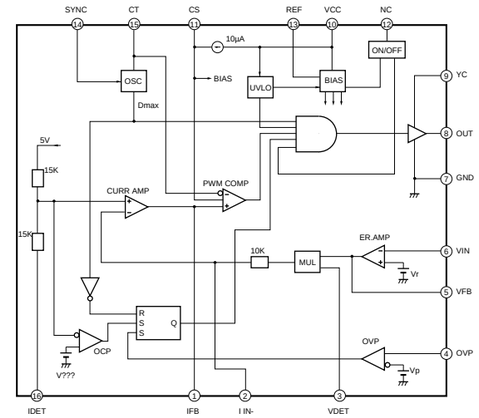


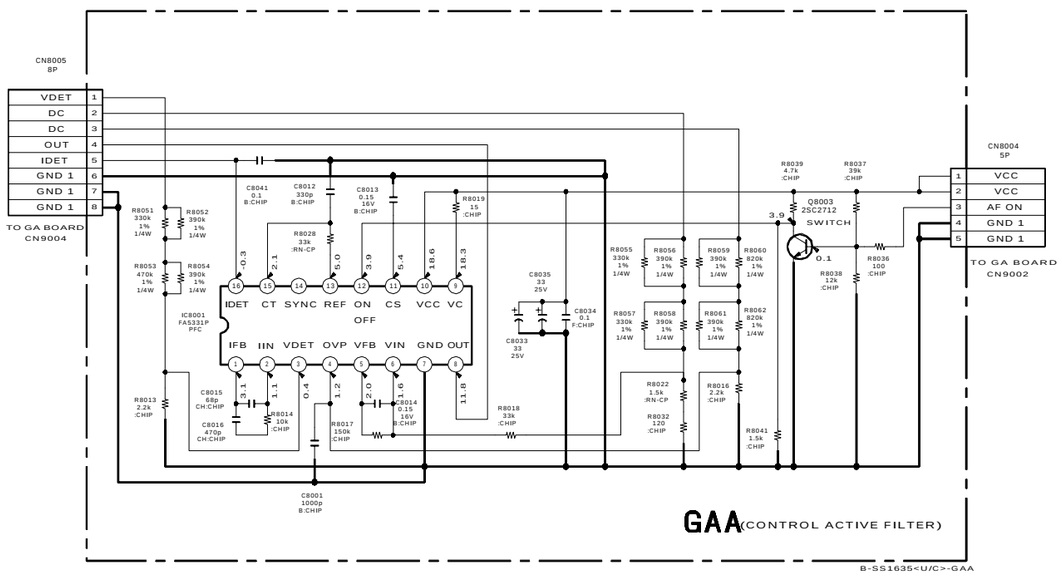
GAA –B SIDE–

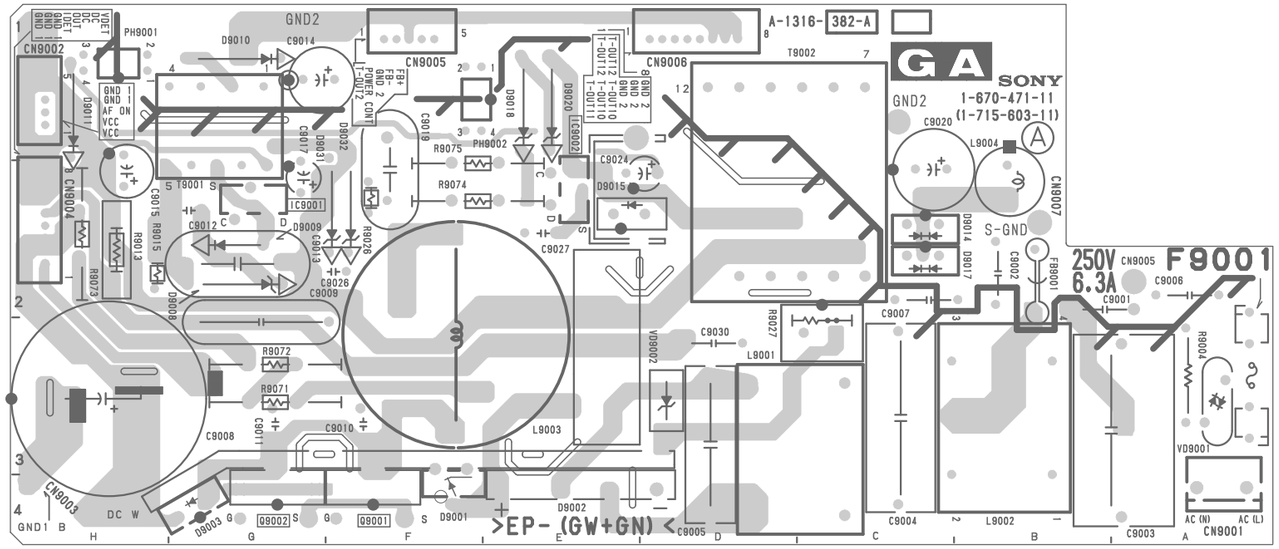
SUFFIX : -11

GAA Board IC Block Diagram

FA5331P

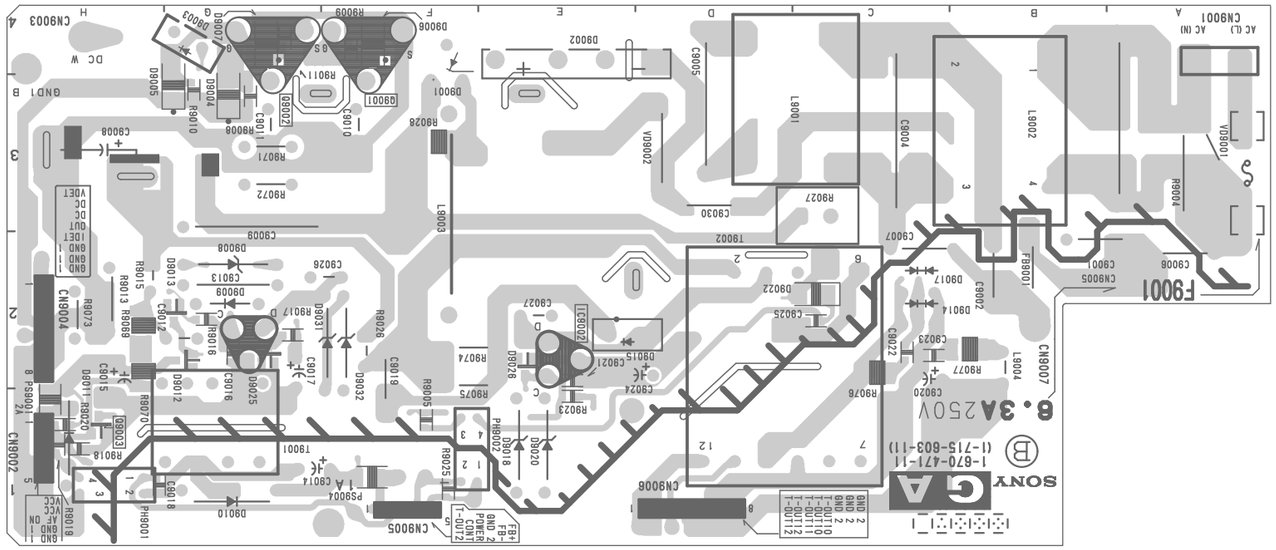






GA –A SIDE–

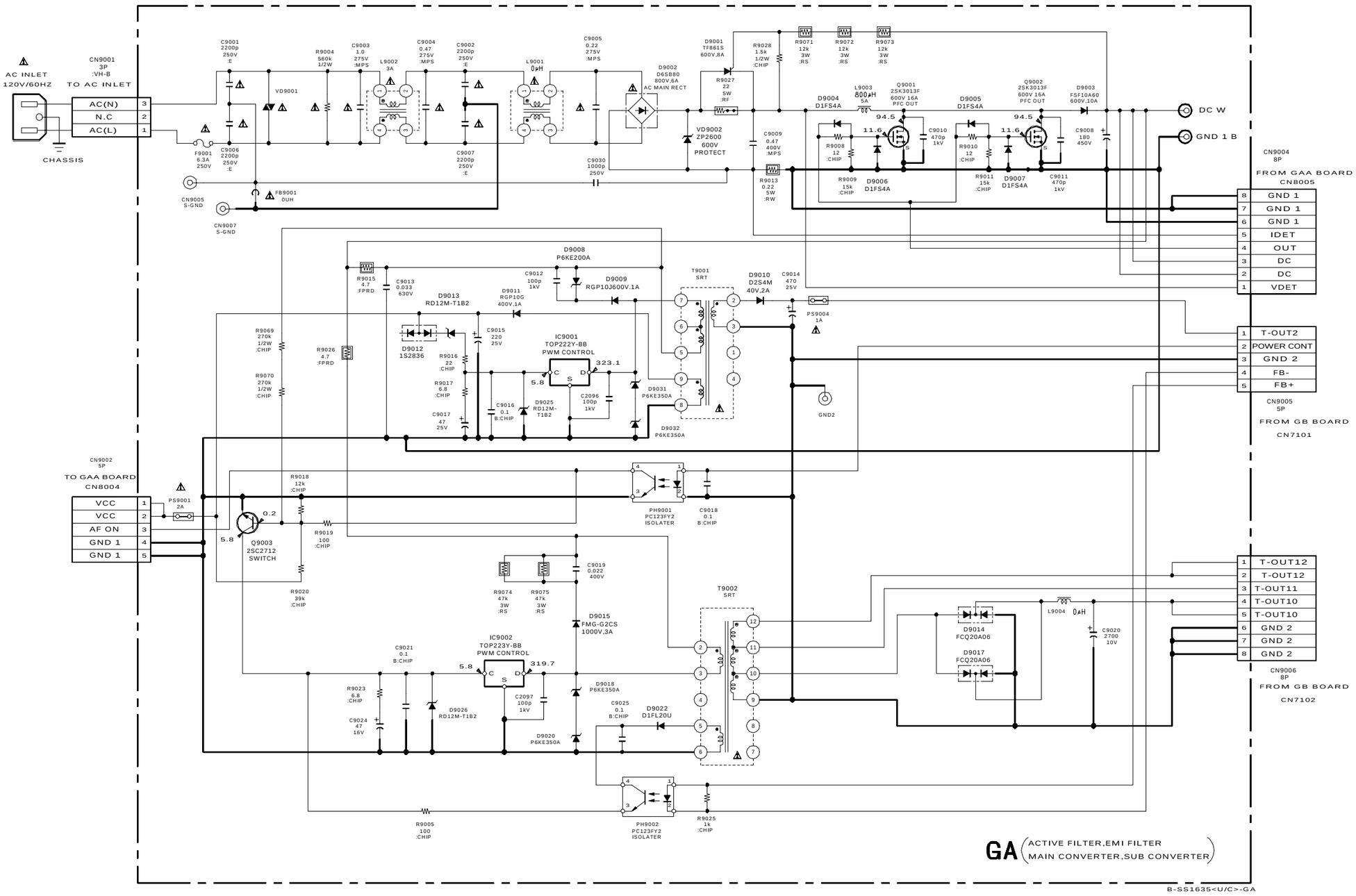
SUFFIX : -11



GA –B SIDE–

SUFFIX : -11

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.


AC INLET
120V/60HZ
CN9001
3P
:VH-B
TO AC INLET
AC(N) 3
N.C 2
AC(L) 1
CHASSIS
F9001
6.3A
250V
C9001
2200p
250V
:E
C9006
2200p
250V
:E
VD9001
R9004
560k
1/2W
C9003
1.0
275V
:MPS
L9002
3A
C9004
0.47
275V
:MPS
C9002
2200p
250V
:E
C9007
2200p
250V
:E
L9001
0μH
C9005
0.22
275V
:MPS
C9030
1000p
250V
D9002
D6SB80
800V,6A
AC MAIN RECT
D9001
TF861S
600V,8A
R9027
22
5W
:RF
R9028
1.5k
1/2W
:CHIP
R9071
12k
3W
:RS
R9072
12k
3W
:RS
R9073
12k
3W
:RS
VD9002
ZP2600
600V
PROTECT
C9009
0.47
400V
:MPS
R9013
0.22
5W
:RW
D9004
D1FS4A
L9003
800μH
5A
Q9001
2SK3013F
600V 16A
PFC OUT
D9005
D1FS4A
Q9002
2SK3013F
600V 16A
PFC OUT
D9003
FSF10A60
600V,10A
R9008
12
:CHIP
R9009
15k
:CHIP
C9010
470p
1kV
R9010
12
:CHIP
R9011
15k
:CHIP
C9011
470p
1kV
C9008
180
450V
D9006
D1FS4A
D9007
D1FS4A
94.5
11.6
DC W
GND 1 B
CN9004
8P
FROM GAA BOARD
CN8005
8 GND 1
7 GND 1
6 GND 1
5 IDET
4 OUT
3 DC
2 DC
1 VDET
CN9005
5P
FROM GB BOARD
CN7101
1 T-OUT2
2 POWER CONT
3 GND 2
4 FB-
5 FB+
CN9005
S-GND
CN9007
S-GND
FB9001
0UH
D9008
P6KE200A
R9015
4.7
:FPRD
C9013
0.033
630V
D9013
RD12M-T1B2
D9011
RGP10G
400V,1A
C9012
100p
1kV
D9009
RGP10J600V.1A
T9001
SRT
D9010
D2S4M
40V,2A
C9014
470
25V
PS9004
1A
GND2
R9069
270k
1/2W
:CHIP
R9070
270k
1/2W
:CHIP
R9026
4.7
:FPRD
D9012
1S2836
C9015
220
25V
IC9001
TOP222Y-BB
PWM CONTROL
5.8
323.1
C
D
S
R9016
22
:CHIP
R9017
6.8
:CHIP
C9017
47
25V
C9016
0.1
B:CHIP
D9025
RD12M-
T1B2
C2096
100p
1kV
D9031
P6KE350A
D9032
P6KE350A
CN9002
5P
TO GAA BOARD
CN8004
VCC 1
VCC 2
AF ON 3
GND 1 4
GND 1 5
PS9001
2A
0.2
5.8
Q9003
2SC2712
SWITCH
R9018
12k
:CHIP
R9019
100
:CHIP
R9020
39k
:CHIP
PH9001
PC123FY2
ISOLATER
C9018
0.1
B:CHIP
R9074
47k
3W
:RS
R9075
47k
3W
:RS
C9019
0.022
400V
D9015
FMG-G2CS
1000V,3A
T9002
SRT
IC9002
TOP223Y-BB
PWM CONTROL
5.8
319.7
C9021
0.1
B:CHIP
R9023
6.8
:CHIP
C9024
47
16V
D9026
RD12M-T1B2
C2097
100p
1kV
D9018
P6KE350A
D9020
P6KE350A
C9025
0.1
B:CHIP
D9022
D1FL20U
D9014
FCQ20A06
D9017
FCQ20A06
L9004
0.4H
C9020
2700
10V
CN9006
8P
FROM GB BOARD
CN7102
1 T-OUT12
2 T-OUT12
3 T-OUT11
4 T-OUT10
5 T-OUT10
6 GND 2
7 GND 2
8 GND 2
PH9002
PC123FY2
ISOLATER
R9025
1k
:CHIP
R9005
100
:CHIP
GA (ACTIVE FILTER,EMI FILTER
MAIN CONVERTER,SUB CONVERTER)
B-SS1635<U/C>-GA

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GB
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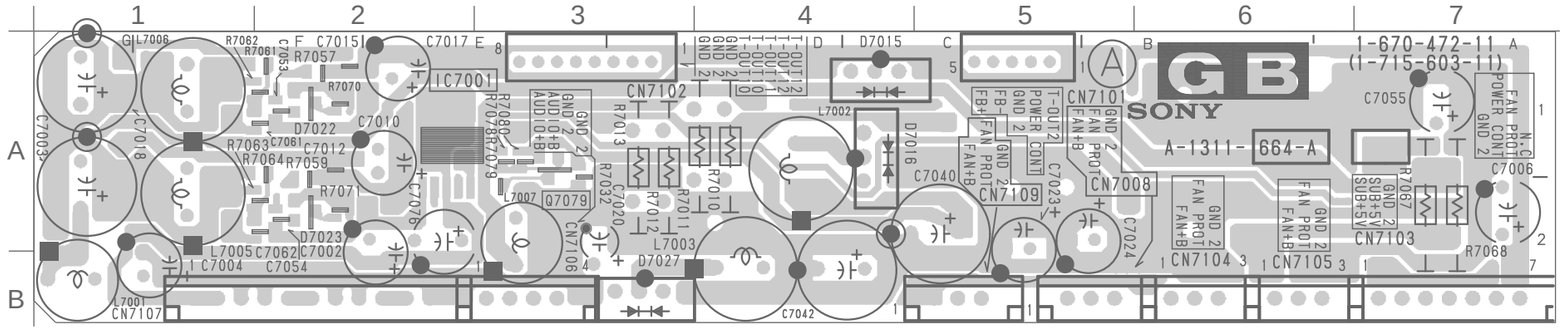
1-670-472-11

D7001 *A-5
D7002 *B-1
D7008 *A-1
D7009 *A-5
D7010 *A-6
D7015 *B-4
D7016 *A-4
D7020 *A-6
D7022 A-2
D7023 A-2
D7027 *A-3

IC7001 A-2
IC7002 *A-7
IC7005 *A-3
IC7008 *A-2
IC7009 *A-2

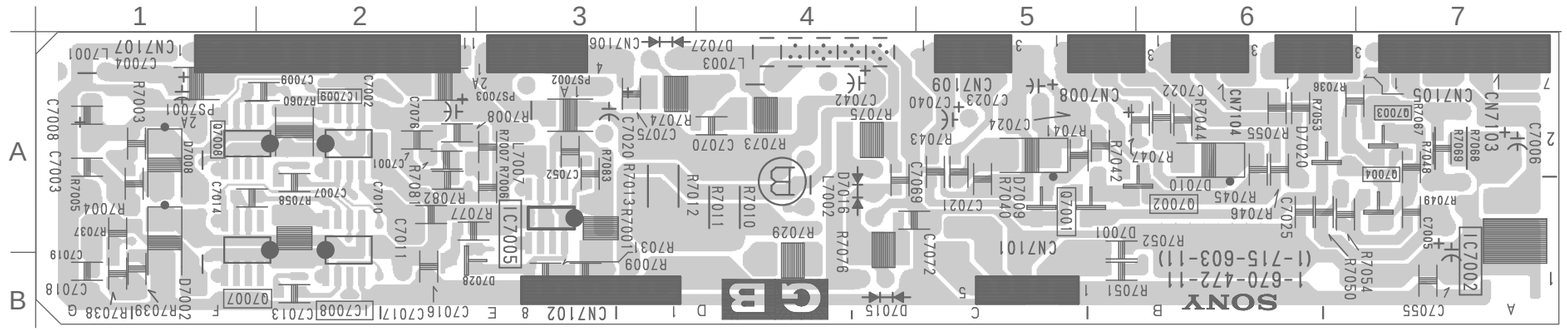
Q7001 *A-5
Q7002 *A-6
Q7003 *A-7
Q7004 *A-7
Q7007 *A-1
Q7008 *A-1
Q7079 A-3

*:B Side mount



GB –A SIDE–

SUFFIX : -11



GB –B SIDE–

SUFFIX : -11

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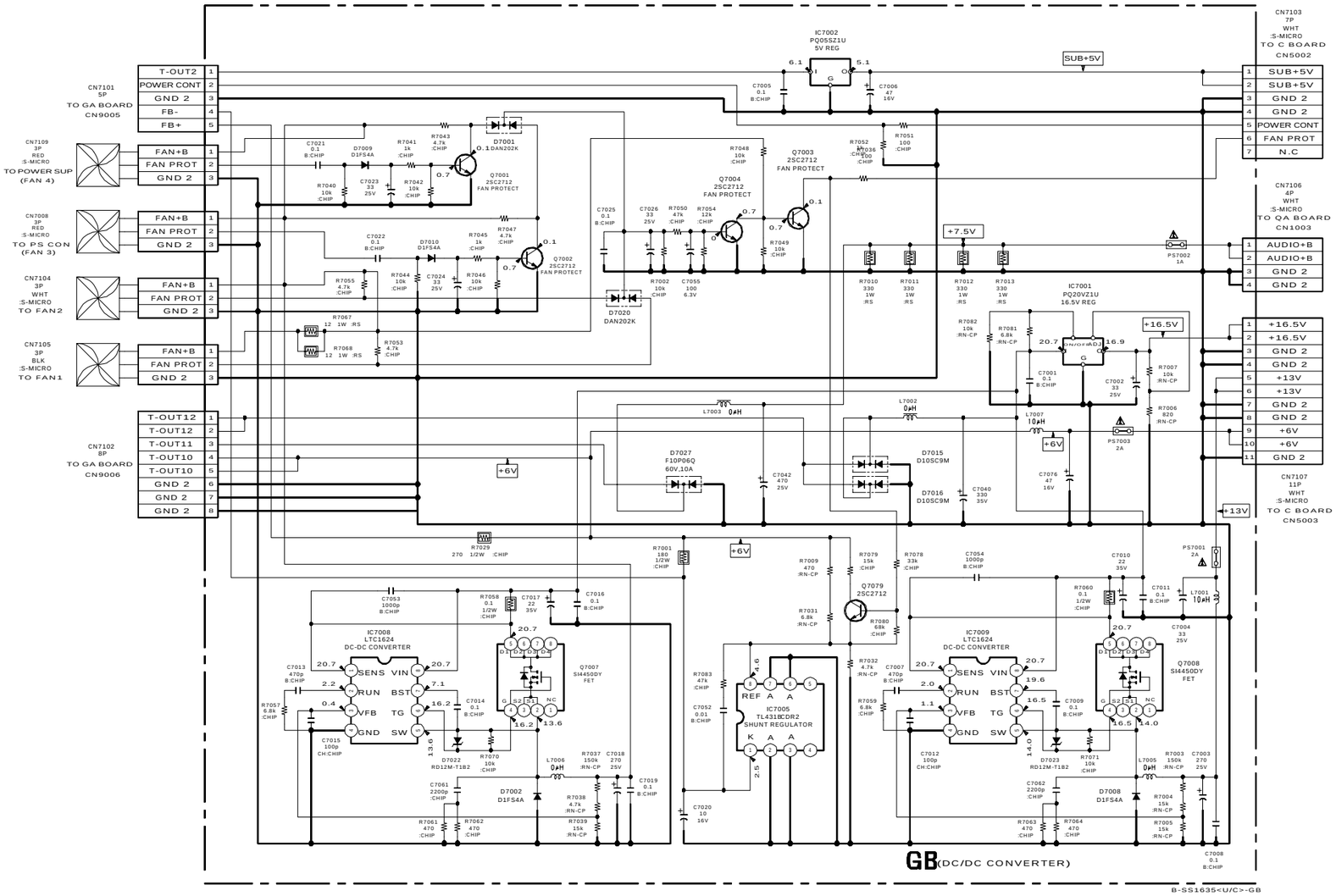

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